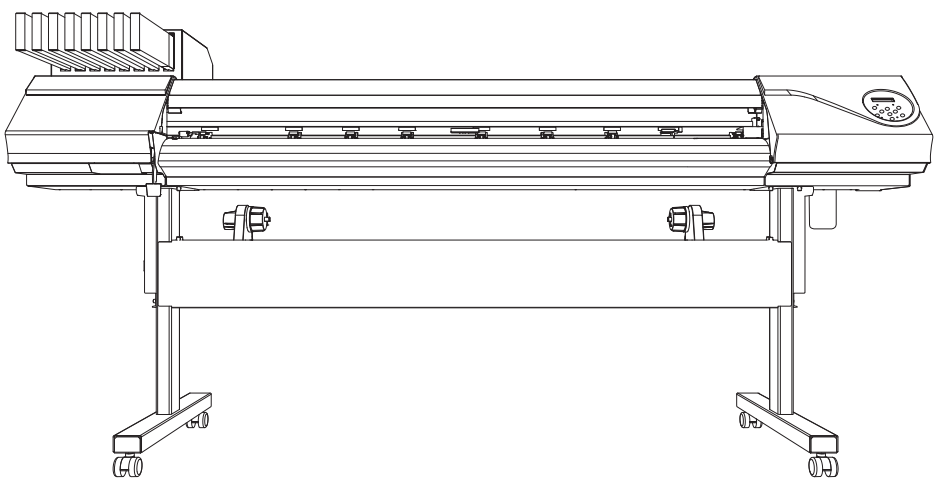
Roland

VersaEXPRESS

RF-640 / RF-640A

USER'S MANUAL



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Setup Guide

You can obtain the Setup Guide by downloading from the following website.
http://www.rolanddg.com/

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1. Installation Environment
2. Included Items
3. About the Symbols
4. Assembling and Installing
5. Connecting the Cables
6. Filling with Ink
7. Network Settings
8. When Moving the Machine

This manual is the Use's Manual for the RF-640 and the RF-640A. Most of the figures in this manual depict the RF-640.

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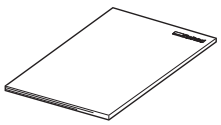
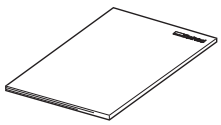
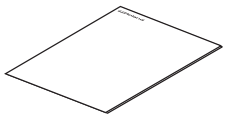
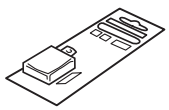
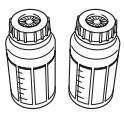
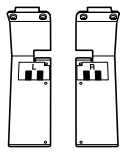
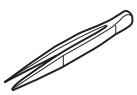
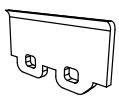
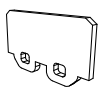
Included Items

The following items are packed together with the machine. Make sure they are all present and accounted for.

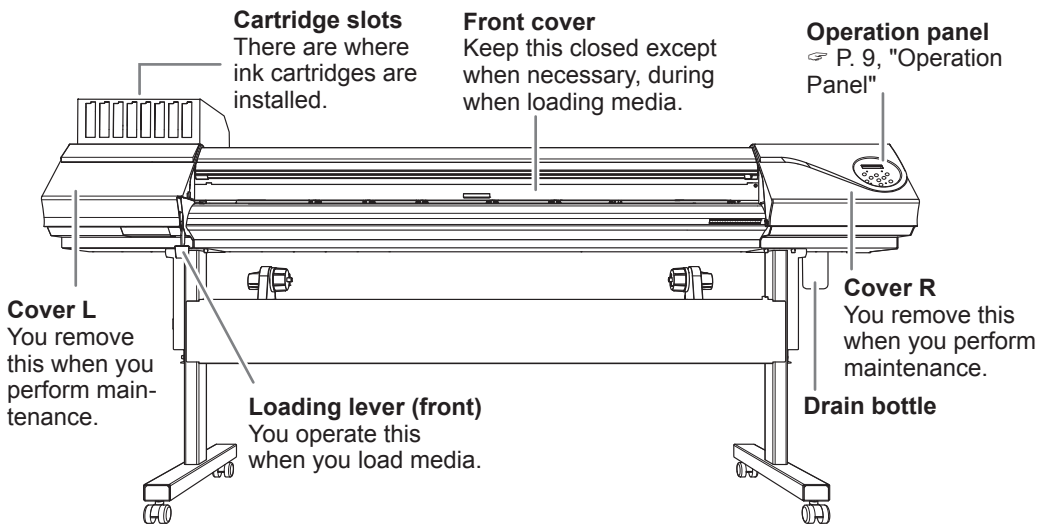
 User's manual (1)	 Read This First (1)	 *INKJET PRINTER MAINTENANCE GUIDE (1)	*Cleaning liquid (1)
Cleaning sticks	 Replacement blades for separating knife (1)	 Drain bottles (2)	 Media clamps (one for right and left each)
 Tweezers (1)	 Replacement wiper (1)	 Replacement felt wiper (1)	*RIP&PRINT MANAGEMENT SOFTWARE (1)

*RF-640A does not include the items.

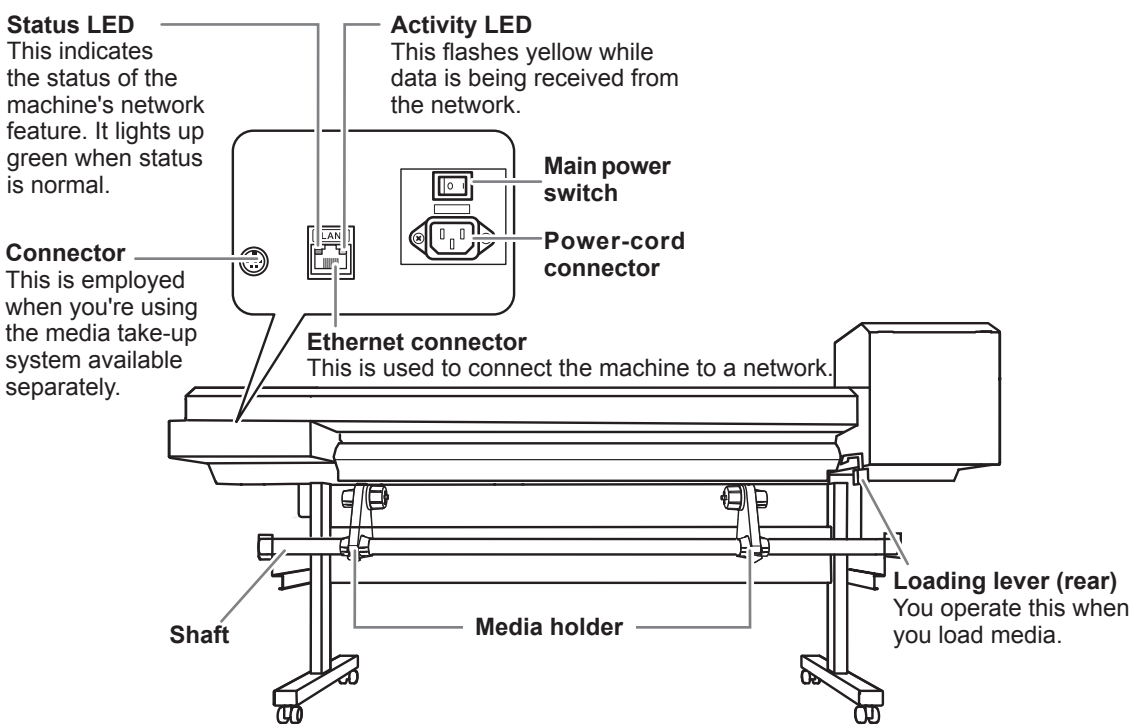
Part Names and Functions

Machine

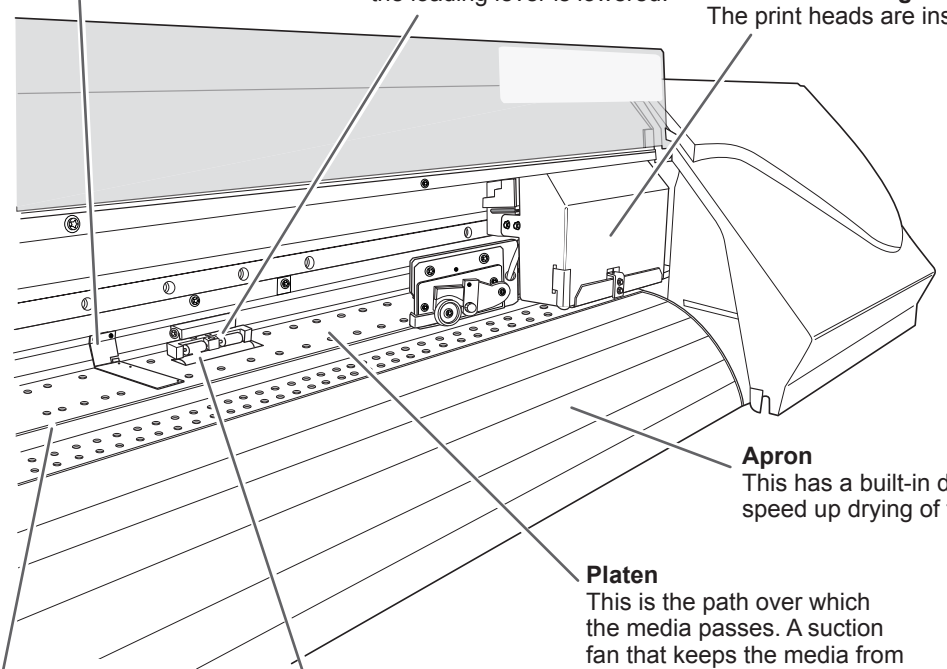
Front



Rear



Front Cover Inside / Print Head Periphery



Media clamps
These keep the media from coming loose and prevent fuzz on the cut edge of the media from touching the print heads.

Pinch rollers
These clamp the media when the loading lever is lowered.

Print-head carriage
The print heads are inside this.

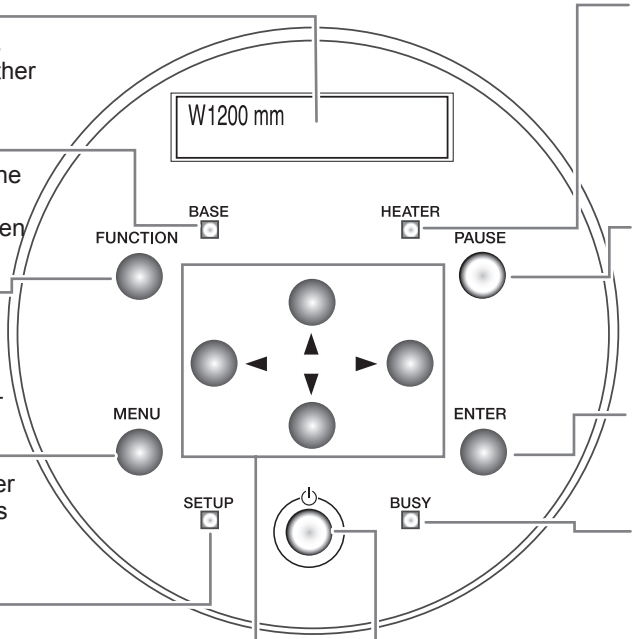
Apron
This has a built-in dryer to speed up drying of the ink.

Platen
This is the path over which the media passes. A suction fan that keeps the media from coming loose and print heater that helps fix the ink are built in.

Knife guide
The separating knife passes through this when you perform media cutoff.

Grid rollers
These rollers feed out media toward the front of the machine.

Operation Panel



Display screen
This displays various setting menus and other information.

BASE POINT light
This lights up when the base point (the print-start location) has been set.

FUNCTION key
You press this when entering the setting menu for cleaning of the print heads, printing tests.

MENU key
You press this to enter the menus for various settings.

SETUP light
This lights up when media has been loaded correctly.

HEATER light
This flashes while the media heating system is warming up, changing to a steadily lighted state when the preset temperature is reached.

PAUSE key
This pauses printing operation. This lights up when operation is paused.

ENTER key
You use this for such tasks as enabling setting values.

BUSY light
This lights up during printing and other such operations.

Cursor keys
You use these to select settings for menu items, to move the media, and for other such operations.

Sub power switch
This switches the machine on and off. (To switch the machine off, you hold down the switch for one second or longer). The light flashes slowly when the machine is in the sleep mode.

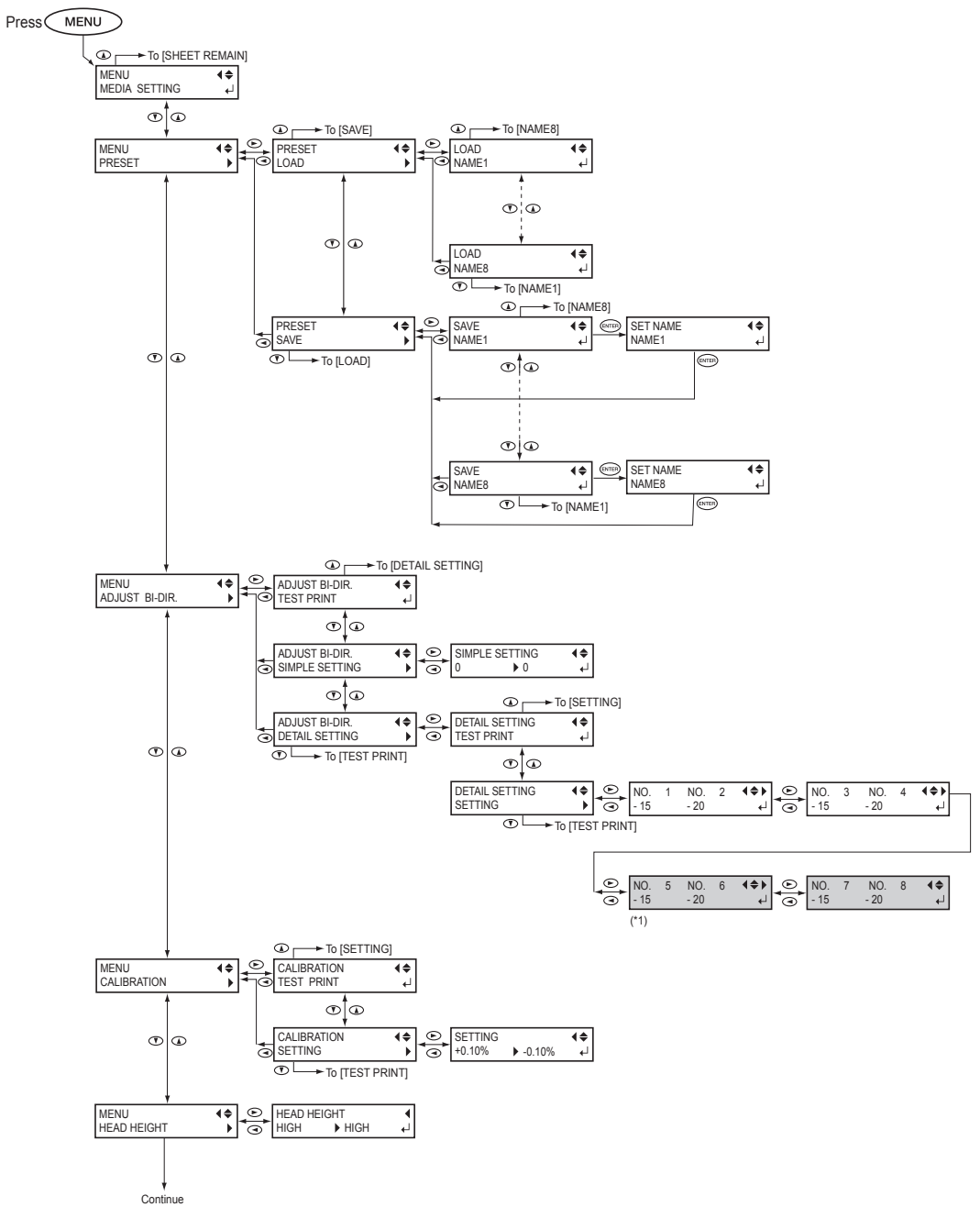
Panel Notation

In this manual, the keys and lights on the operation panel are indicated by the following illustration.

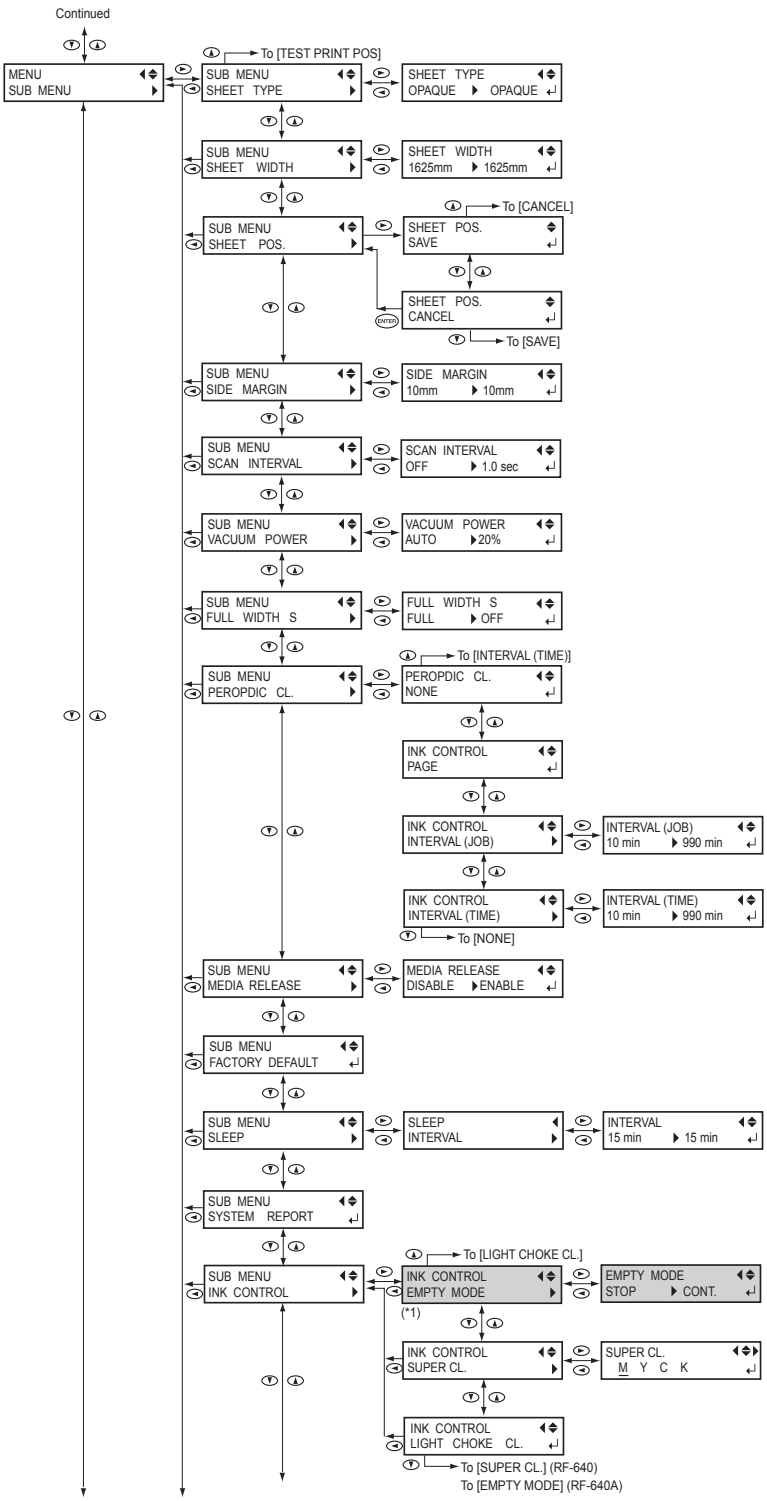
(MENU) **MENU key**
(FUNCTION) **FUNCTION key**
(ENTER) **ENTER key**
(PAUSE) **PAUSE key**
(▲) (▼) (◄) (►) **Cursor keys**
[SETUP] **SETUP light**
[BUSY] **BUSY light**
[BASE] **BASE POINT light**
[HEATER] **HEATER light**

Menu List

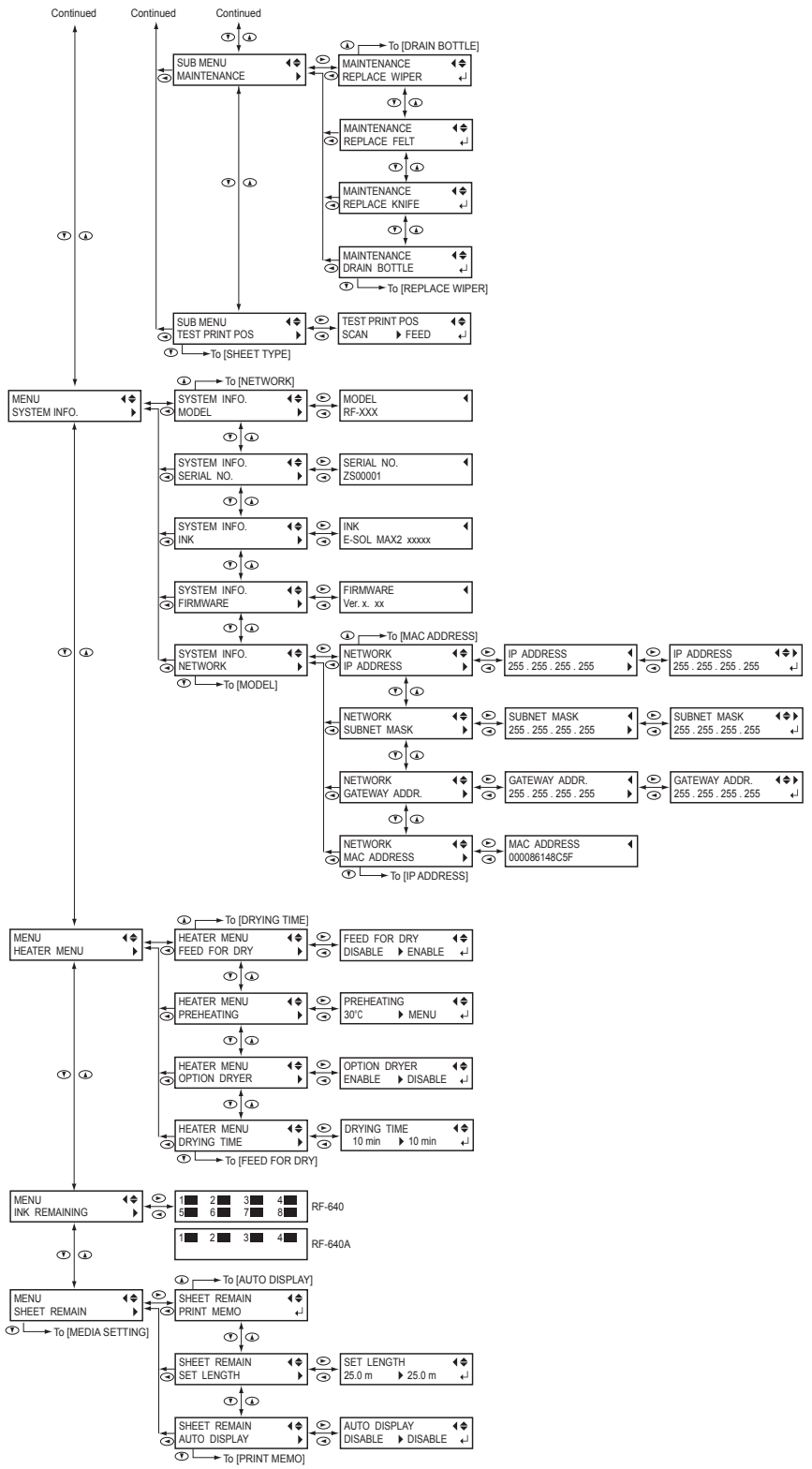
Main Menu



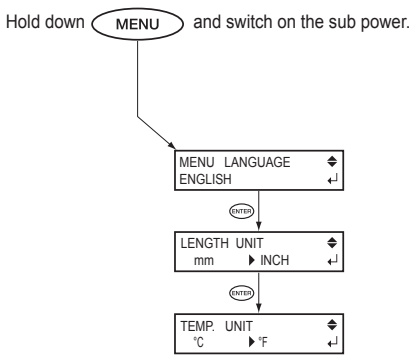
(*1) This menu is not displayed when solvent-based ink is used.



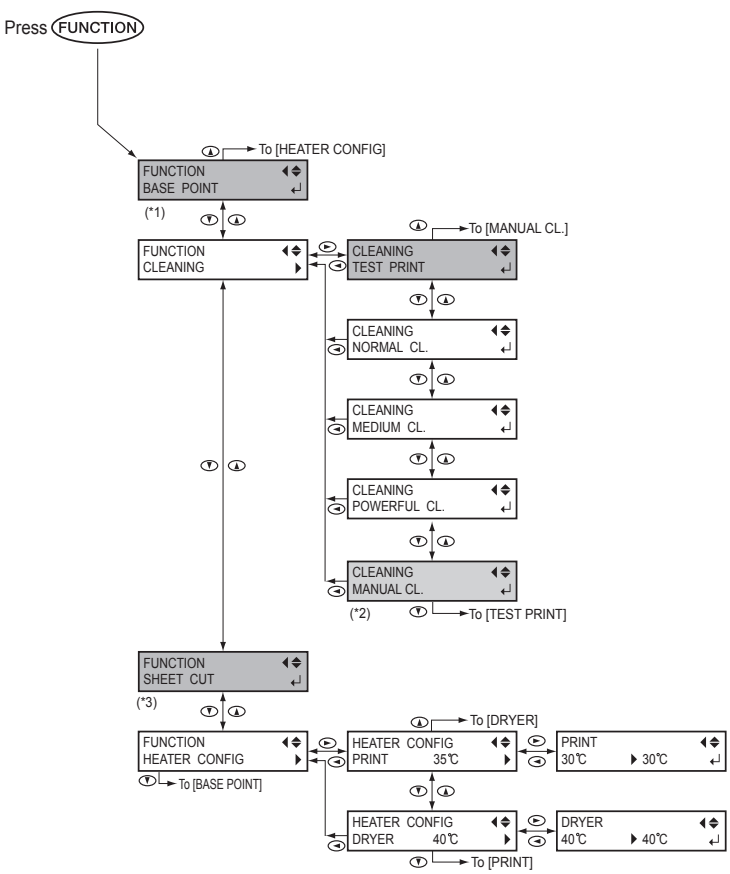
(*1) This menu is not displayed in the RF-640.


Continued
Continued
Continued
SUB MENU
MAINTENANCE
To [DRAIN BOTTLE]
MAINTENANCE
REPLACE WIPER
MAINTENANCE
REPLACE FELT
MAINTENANCE
REPLACE KNIFE
MAINTENANCE
DRAIN BOTTLE
To [REPLACE WIPER]
SUB MENU
TEST PRINT POS
TEST PRINT POS
SCAN FEED
To [SHEET TYPE]
MENU
SYSTEM INFO.
To [NETWORK]
SYSTEM INFO.
MODEL
MODEL
RF-XXX
SYSTEM INFO.
SERIAL NO.
SERIAL NO.
ZS00001
SYSTEM INFO.
INK
INK
E-SOL MAX2 xxxxx
SYSTEM INFO.
FIRMWARE
FIRMWARE
Ver. x. xx
SYSTEM INFO.
NETWORK
To [MAC ADDRESS]
NETWORK
IP ADDRESS
IP ADDRESS
255 . 255 . 255 . 255
IP ADDRESS
255 . 255 . 255 . 255
NETWORK
SUBNET MASK
SUBNET MASK
255 . 255 . 255 . 255
SUBNET MASK
255 . 255 . 255 . 255
NETWORK
GATEWAY ADDR.
GATEWAY ADDR.
255 . 255 . 255 . 255
GATEWAY ADDR.
255 . 255 . 255 . 255
NETWORK
MAC ADDRESS
MAC ADDRESS
000086148C5F
To [IP ADDRESS]
To [MODEL]
MENU
HEATER MENU
To [DRYING TIME]
HEATER MENU
FEED FOR DRY
FEED FOR DRY
DISABLE ENABLE
HEATER MENU
PREHEATING
PREHEATING
30°C MENU
HEATER MENU
OPTION DRYER
OPTION DRYER
ENABLE DISABLE
HEATER MENU
DRYING TIME
DRYING TIME
10 min 10 min
To [FEED FOR DRY]
MENU
INK REMAINING
1 2 3 4
5 6 7 8
RF-640
1 2 3 4
RF-640A
MENU
SHEET REMAIN
To [AUTO DISPLAY]
SHEET REMAIN
PRINT MEMO
To [MEDIA SETTING]
SHEET REMAIN
SET LENGTH
SET LENGTH
25.0 m 25.0 m
SHEET REMAIN
AUTO DISPLAY
AUTO DISPLAY
DISABLE DISABLE
To [PRINT MEMO]

Language and Unit Menu



Function Menu



(*1) This is not displayed when no media is loaded (that is, when SETUP is dark) or when it is not ready for the base point setting. For more details, refer to P. 39, "Setting the Print-Start Location"

(*2) This is displayed when no media is loaded (that is, when SETUP is dark) or when the width of the media is displayed after the media has been loaded.

(*3) This is not displayed when no media is loaded (that is, when SETUP is dark).

Important Notes on Handling and Use

This machine is a precision device. To ensure the full performance of this machine, be sure to observe the following important points. Failure to observe them may not only result in loss of performance, but may also cause malfunction or breakdown.

Machine

This machine is a precision device.

- **Never subject the machine to impact or excessive force.**
- **Never needlessly put your hand or fingers inside the cover, the ink-cartridge ports, or other internal areas of the machine.**

Install in a suitable location.

- **Install in a location having the specified temperature and relative humidity.**
- **Install in a quiet, stable location offering good operating conditions.**

The print heads are delicate.

- **Never needlessly touch or allow media to scrape it.**
- **The print heads may be damaged if allowed to dry out. The machine prevents desiccation automatically, but improper operation may render this feature inoperative. Operate properly, as specified in this manual.**
- **Never allow the machine to stand with an ink cartridge removed. Remaining ink in the machine may harden and clog the print heads.**
- **The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use.**

This machine becomes hot.

- **Never cover the ventilation holes with cloth, tape, or anything else.**

Ink Cartridges

Ink cartridges come in various types.

- **Use a type that is compatible with the machine.**

Never subject to impact or attempt to disassemble.

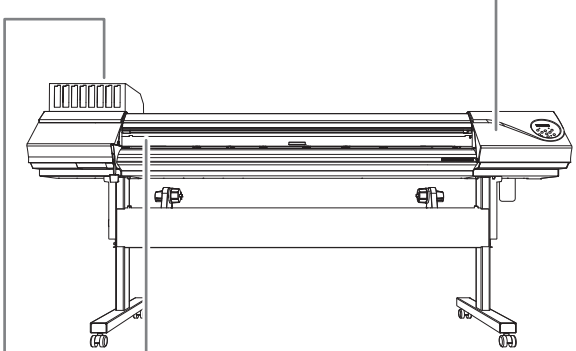
- **Never drop or shake forcefully. The impact may rupture the internal pouch and cause the ink to leak.**
- **Never attempt to disassemble.**
- **Never attempt to refill the ink.**
- **If ink gets on your hands or clothing, wash it off as soon as possible. Removal may become difficult if allowed to stand.**

Storage

- **Store unopened in a well-ventilated location at a temperature of -20 to 40°C (-4 to 104°F).**

Warning Labels

Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings. Also, never remove the labels or allow them to become obscured.



Caution: Pinching Hazard
Be careful not to allow the fingers to become pinched when closing covers.

Caution: Moving Print-head carriage
The print-head carriage inside the cover move at high speed and pose a hazard. Never insert the hand or fingers into the gap.

Flammable
Ink and discharged fluid are flammable. Keep away from open flame.

Ink Is Toxic
Ink and discharged fluid are toxic. Avoid contact with the body. Use only in a well ventilated area.

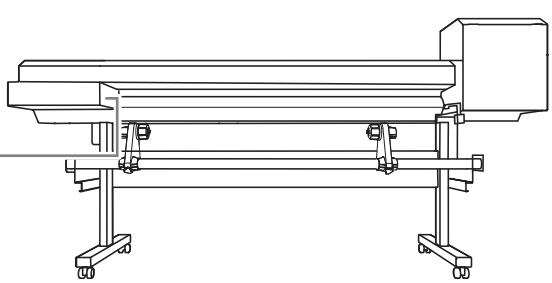
Caution: High Temperature
The platen and dryer become hot. Exercise caution to avoid fire or burns.

Caution: Moving Print-head carriage
The print-head carriage inside the cover move at high speed and pose a hazard. Never insert the hand or fingers into the gap.

Flammable
Ink and discharged fluid are flammable. Keep away from open flame.

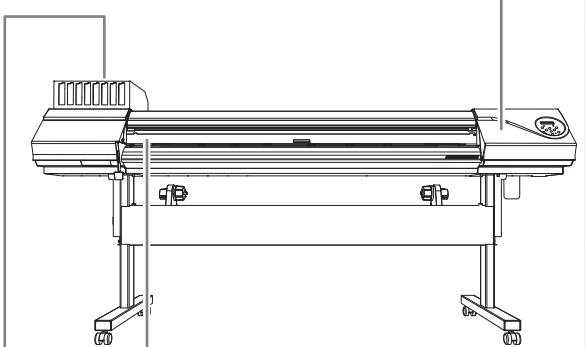
Ink Is Toxic
Ink and discharged fluid are toxic. Avoid contact with the body. Use only in a well ventilated area.

Caution: High Voltage
Cover removal may pose hazard of shock or electrocution due to high voltage.



⚠ Vignettes d'avertissement

Des vignettes d'avertissement sont apposées pour qu'il soit facile de repérer les zones dangereuses. La signification des vignettes est donnée ci-dessous. Respecter les avertissements. Ne jamais retirer les vignettes et ne pas les laisser s'encrasser.

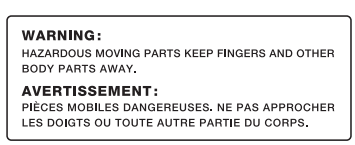


Attention : Risque de pincement
Faire attention de ne pas coincer les doigts pendant le chargement du support ou lors de la fermeture du couvercle.

Attention : Chariot de têtes d'impression mobiles
Les chariot de têtes d'impression sous le couvercle se déplacent à haute vitesse et représentent un danger.

Inflammable
L'encre et les liquides usés sont inflammables. Les garder loin de toute flamme nue.

L'encre est toxique
L'encre et les liquides usés sont toxiques. Éviter tout contact avec le corps. Utiliser uniquement dans un endroit bien aéré.



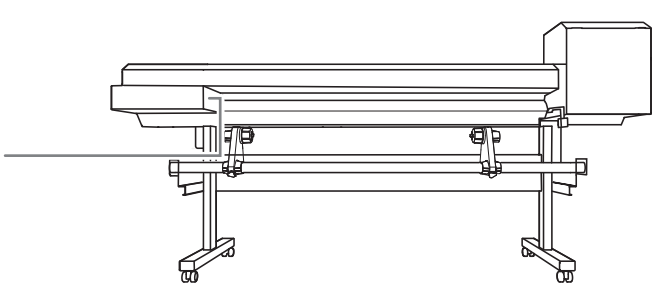
Attention : Température élevée
La platine et la surface de séchage chauffent. Être prudent pour éviter un incendie ou des brûlures.

Inflammable
L'encre et les liquides usés sont inflammables. Les garder loin de toute flamme nue.

L'encre est toxique
L'encre et les liquides usés sont toxiques. Éviter tout contact avec le corps. Utiliser uniquement dans un endroit bien aéré.

Attention : Chariot de têtes d'impression mobiles
Les chariot de têtes d'impression sous le couvercle se déplacent à haute vitesse et représentent un danger.

Attention : voltage élevé
Il peut être dangereux de retirer le couvercle puisqu'il y aurait des risques de chocs électriques ou d'électrocution à cause du voltage élevé.



Chapter 2
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Prepare the Media

Type of Media

In this manual, the paper used for printing is called "media." There are the following two main media types used in this machine.

- Roll media: Media wound onto a paper tube
- Sheet media: Media not wound onto a paper tube such as standard-size media

Various paper quality types of roll media and sheet media are selectable according your purpose. For detailed information about each media, contact your media supplier. Media is also available from our following website.
http://www.rolanddg.com/

Usable Media

This machine cannot necessarily print every kind of media. When selecting media, be sure to carry out testing in advance to make sure that satisfactory print result is obtained.

Size

Width (for both roll media and sheet media)
259 to 1,625 mm (10.2 to 64 inches)

Maximum (including backing paper) media thickness (for both roll media and sheet media)
1.0 mm (39 mil)

Roll outer diameter
210 mm (8.3 inches)

Paper tube (core) inner diameter
76.2 mm (3 inches) or 50.8 mm (2 inches)
*To use 2 inches media, the optional media flanges are required. For information about optional items, contact your authorized Roland DG Corp. dealer or us.

Roll Weight

40 kg (88 lbs)
*When using the take-up system, conditions are dependent on the usable media of the take-up system.

Other Conditions

Media such as the following cannot be used.

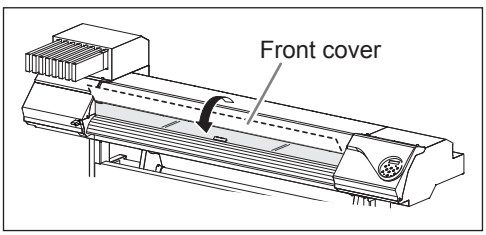
- Media whose end is attached to the paper tube (core)
- Media which is severely warped or which has a strong tendency to reroll
- Media that cannot withstand the heat of the media heating system
- Media whose paper tube (core) is bent or crushed
- Media that bends under its own weight when loaded
- Media on a sagging roll
- Media that is rolled unevenly

Switch On!

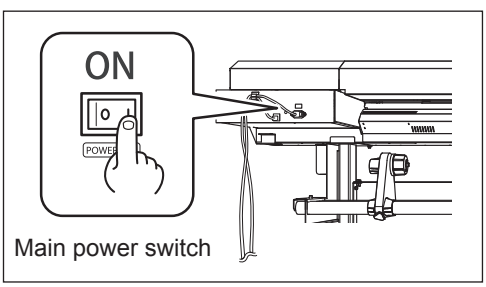
⚠WARNING **When print is not being performed, remove any loaded media or switch off the sub power.**
The continued application of heat at a single location may cause the release of toxic gases from the media or pose a fire hazard.

Procedure

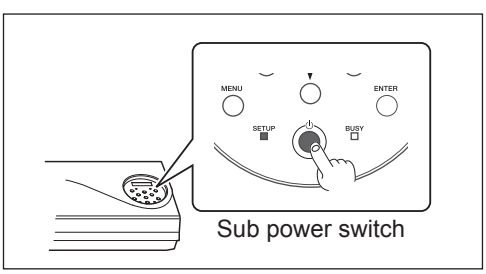
❶ **Close the front cover.**



❷ **Switch on the main power.**



❸ **Switch on the sub power.**



The Power-Saving Feature (Sleep Mode)

This machine is provided with a power-saving feature that switches to a low-power "sleep mode" when a fixed interval passes with no operation. The factory default for the time after which the machine switches to the sleep mode is 30 minutes. When the machine is in the sleep mode, the sub power switch flashes slowly. Using the operation panel or performing operations such as sending print data from the computer restores the machine to its normal mode.
This setting of sleep mode can be changed. However, we recommend setting the activation time for the sleep mode to 30 minutes or less to reduce power consumption and prevent problems such as overheating.

☞ P. 102, "Setting the Interval Until Activation of the Sleep Mode (Power Saving Function)"

Loading Media

Loading Roll Media

⚠CAUTION **Load roll media correctly.**
Otherwise the media may fall and cause injury.

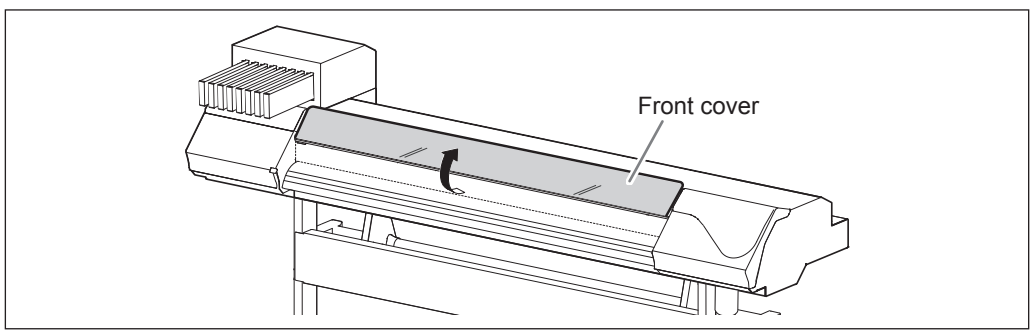
⚠CAUTION **Roll media weighs about 40 kg (88 lbs). To avoid injury, handle with care.**

⚠CAUTION **Never load media that weighs over 40 kg (88 lbs).**
The machine may fail to withstand the weight and tip over or cause the media to fall.

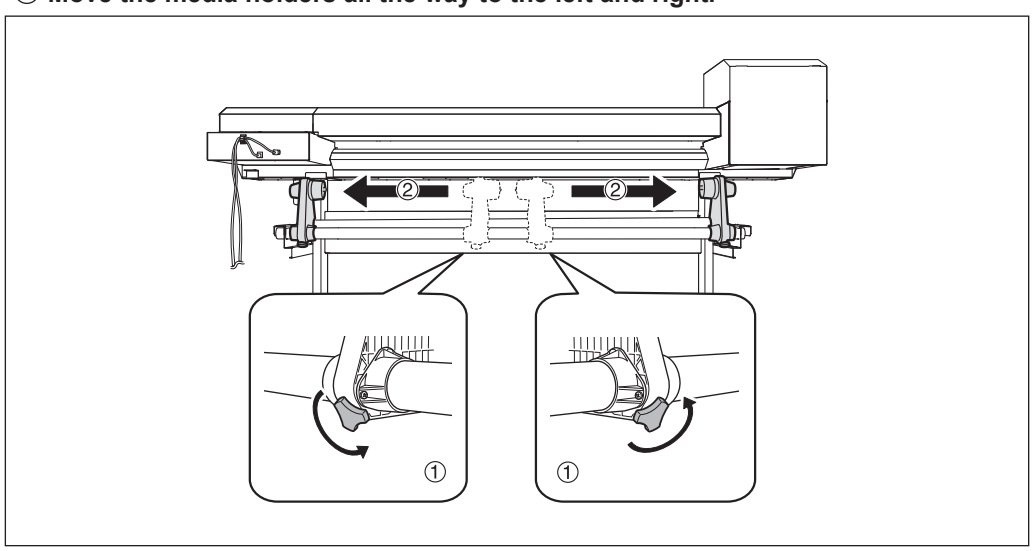
1. Install the media to the media holder.

*The media holder of this machine is exclusive use for the media of paper tube (core) inner diameter 3 inches. To use 2 inches media, the optional media flanges are required. For information about optional items, contact your authorized Roland DG Corp. dealer or us.

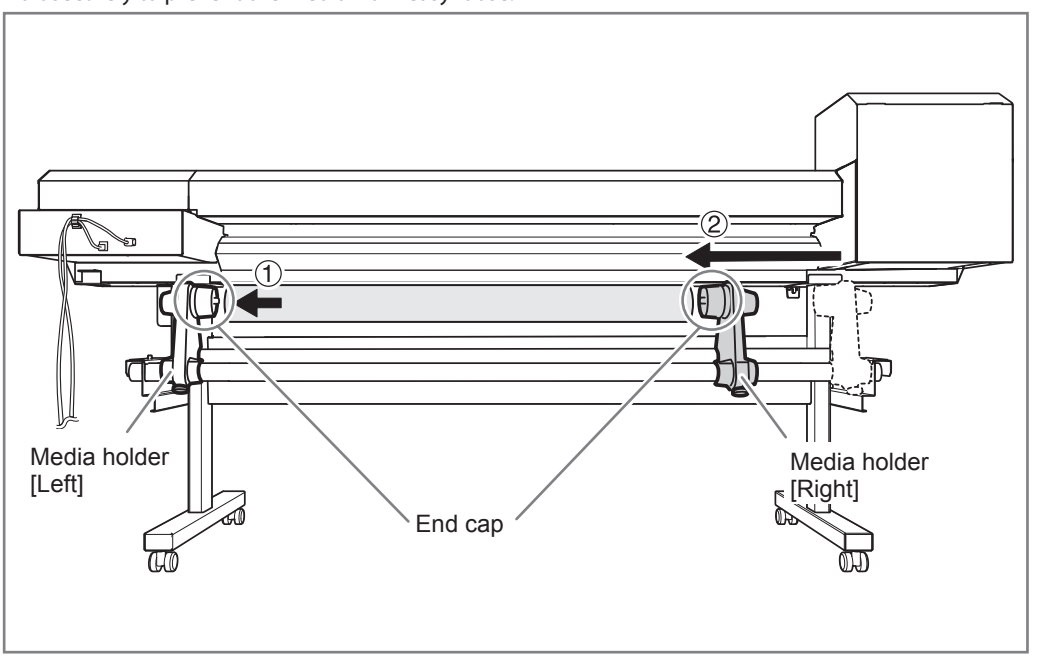
1 **Open the front cover.**
Keep the front cover open until instructed.



2 **① Loosen the retaining screws of the media holders.**
② Move the media holders all the way to the left and right.

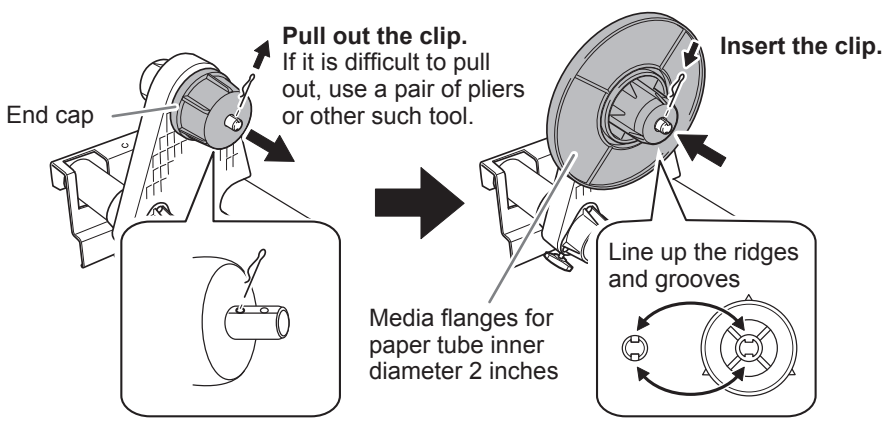


❸ **① Fit the paper tube (core) onto the end cap of the media holder [Left].**
Do not secure the media holder now.
② Move the media holder [Right] and fit the end cap onto the paper tube (core) of the media.
Fit it securely to prevent the media from easy loose.



IMPORTANT! **Install conforming to the procedures.**
Load the media while the left media holder is positioned close to the left edge, as shown in the figure. Also, never secure the media holder in place before loading the media. Loading media without performing these steps in the proper order may make smooth media feed impossible or adversely affect print results.

How to use the media flanges for the paper tube inner diameter 2 inches
* The media flanges for the paper tube inner diameter 2 inches are optional items.

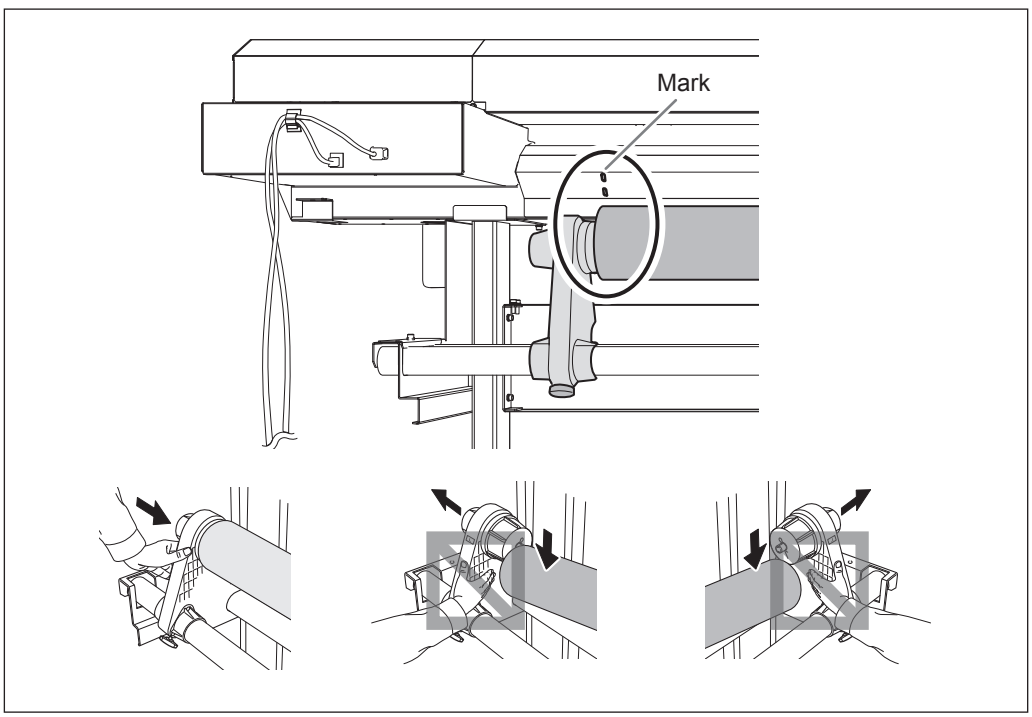


4 Hold the outer side of the media holder [Left] and align the left edge of the media with the mark.

When deciding the position, hold the both sides of media holders from the outer sides and move them. Do not hold the media directly to move.

⚠CAUTION **Never attempt this operation while holding any location other than the one specified.**

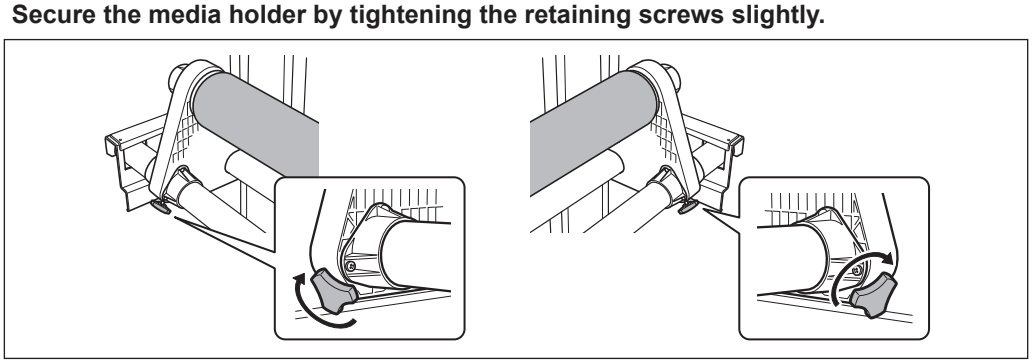
The media may fall from the media holder, resulting in injury.



IMPORTANT! **Decide the left and right side positions of the media finally at this step.**

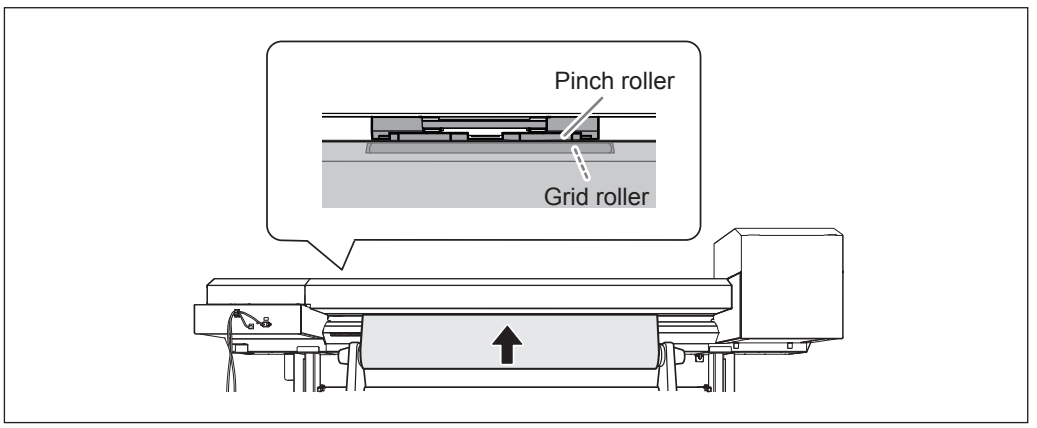
After this procedure is completed, if the left and right side positions do not fit the proper position when securing the media with pinch rollers, go back to this step to redo this procedure. Print quality is affected due to skew media feed, if you hold the media only to readjust the position forcibly.

5 Secure the media holder by tightening the retaining screws slightly.

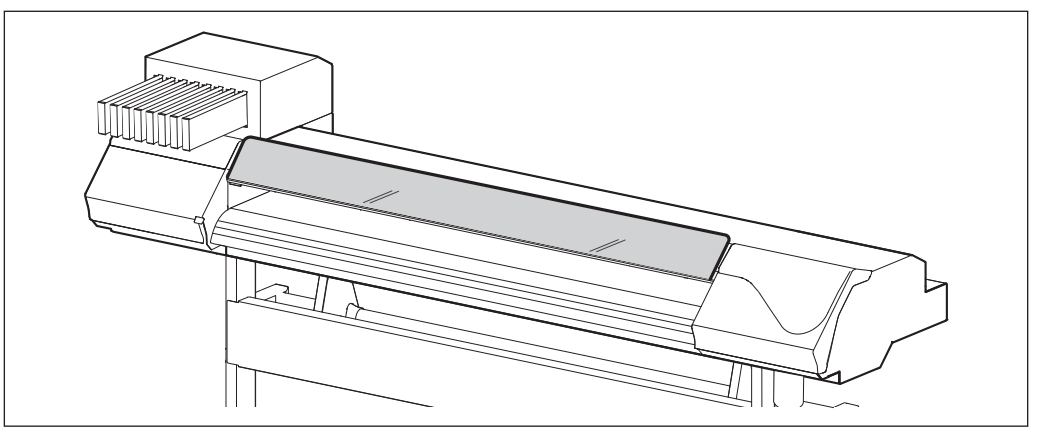


2. Pass the media through the machine and secure the media holders.

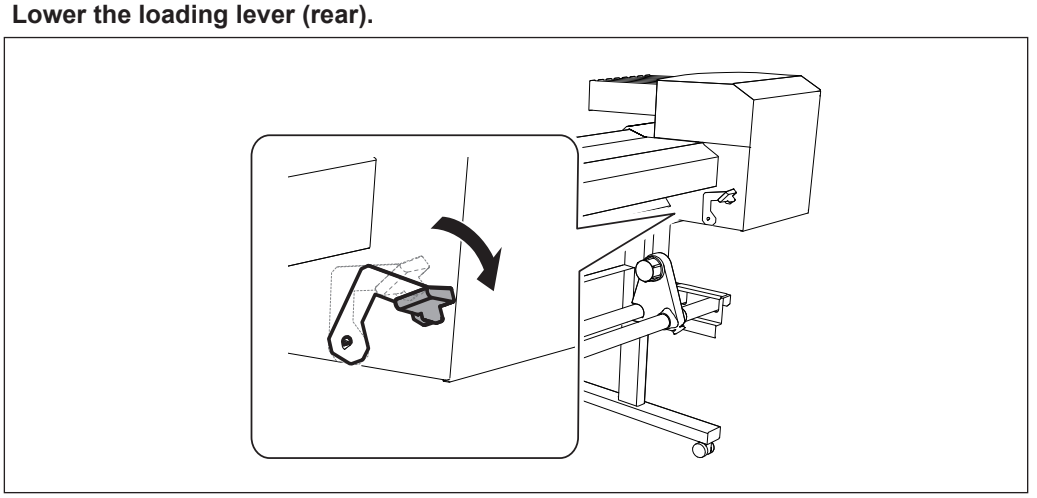
1 **Pass the leading edge of the media between the pinch rollers and the grid rollers.**



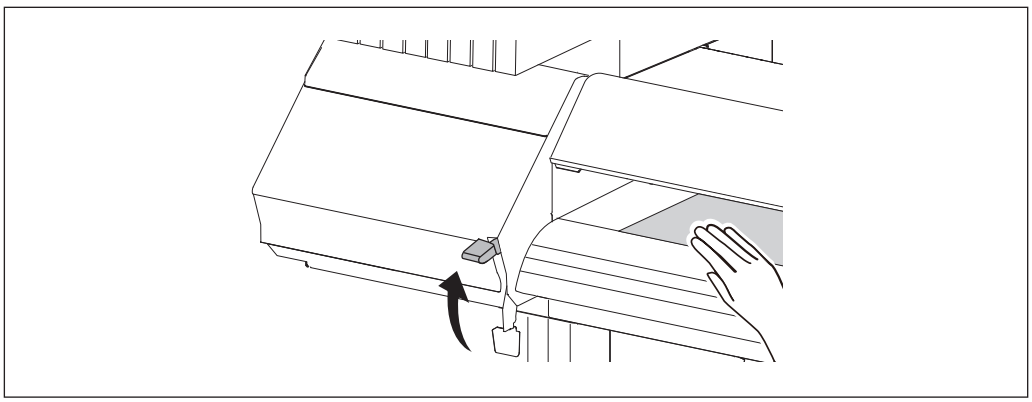
2 **Check the front cover is open.**



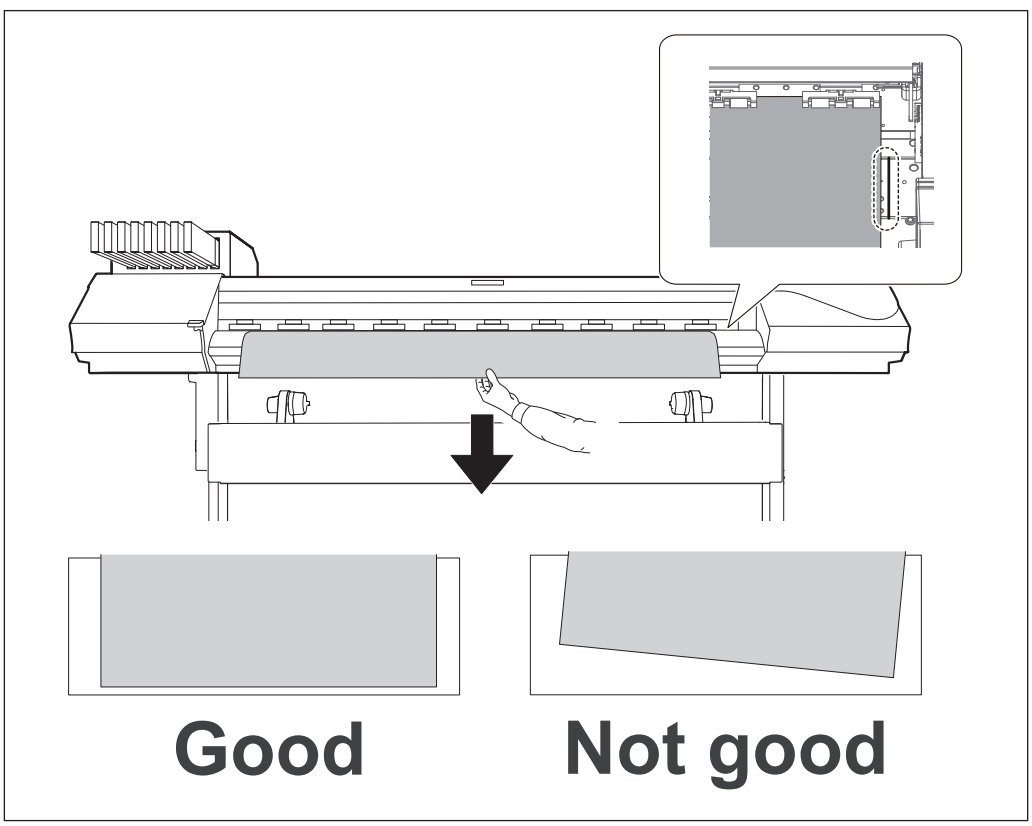
3 **Lower the loading lever (rear).**



❹ **While lightly holding the media, raise the loading lever (front).**
The media is released.



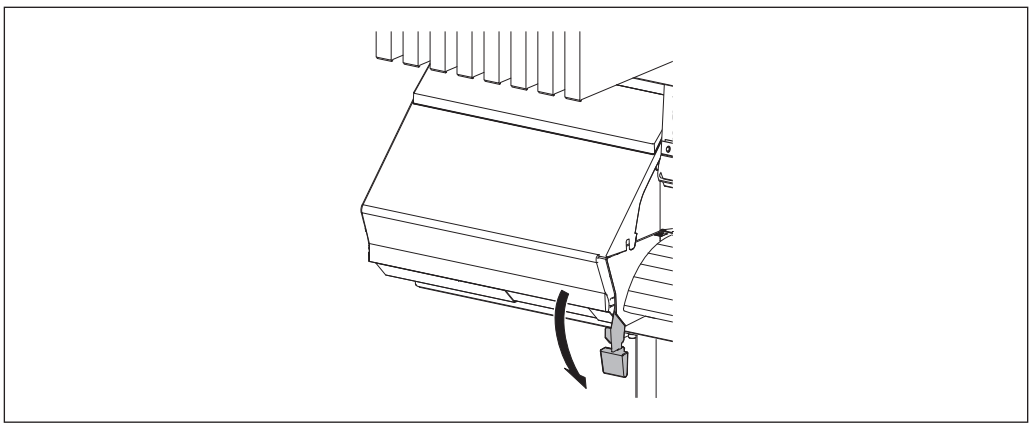
❺ **Hold the media at the center and pull it out, being sure to keep it straight and all areas of the media to be taut.**
Confirm that the right edge of the media is aligned with the guideline.



IMPORTANT!

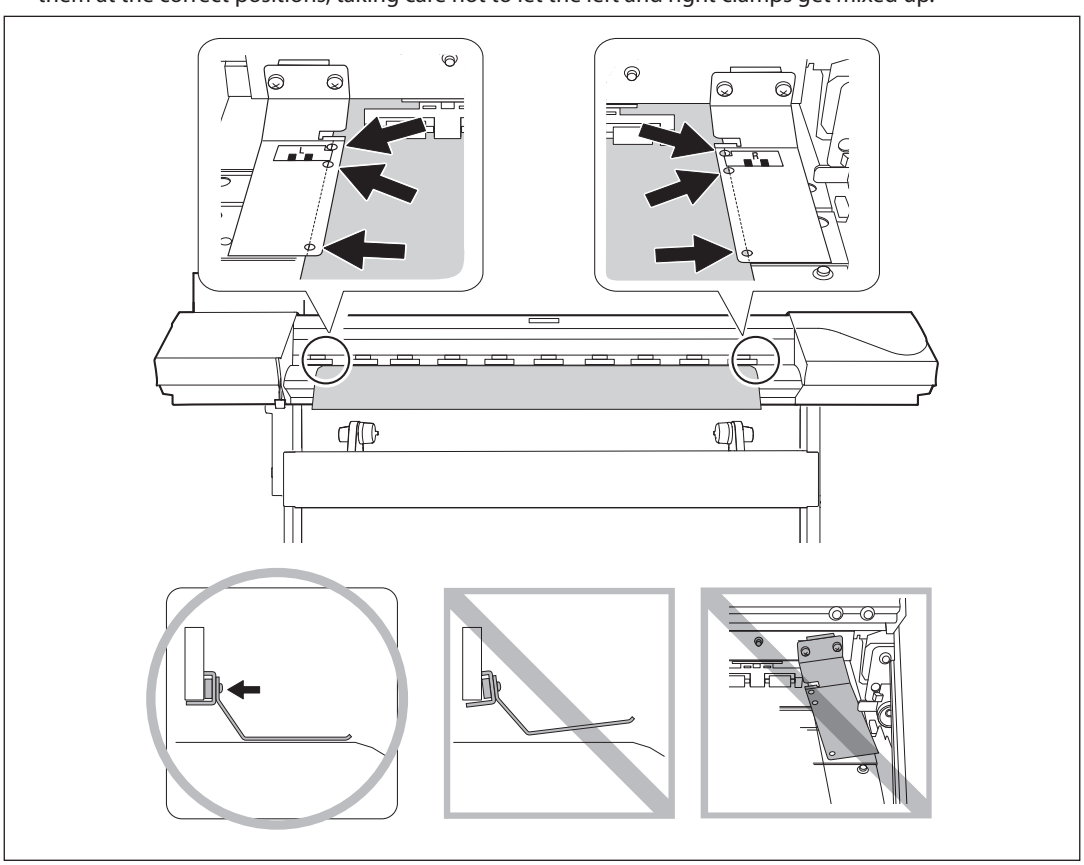
If you want to readjust the media position at this step, go back to the procedure *1.*-❹ and redo the procedures. Print quality is affected due to skew media feed, if you hold the media only to readjust the position forcibly.

❻ **Lower the loading lever (front) to secure the media in place.**



3. Clamp the edges of the media with the media clamps.

❶ **① Attach the media clamps.**
② Align the centers of the holes of the media clamps with the both edges of the media.
The media clamps are magnetic, and the left and right clamps are distinct. Refer to the figure and install them at the correct positions, taking care not to let the left and right clamps get mixed up.



❷ Close the front cover.

When the front cover is closed, the print-head carriage moves and detects the width of media. This operation is called initialization. When initialization ends, SETUP remains steadily lighted, and the printable width is displayed on the display screen. This completes loading of the media.

IMPORTANT! Remove when not using roll media.

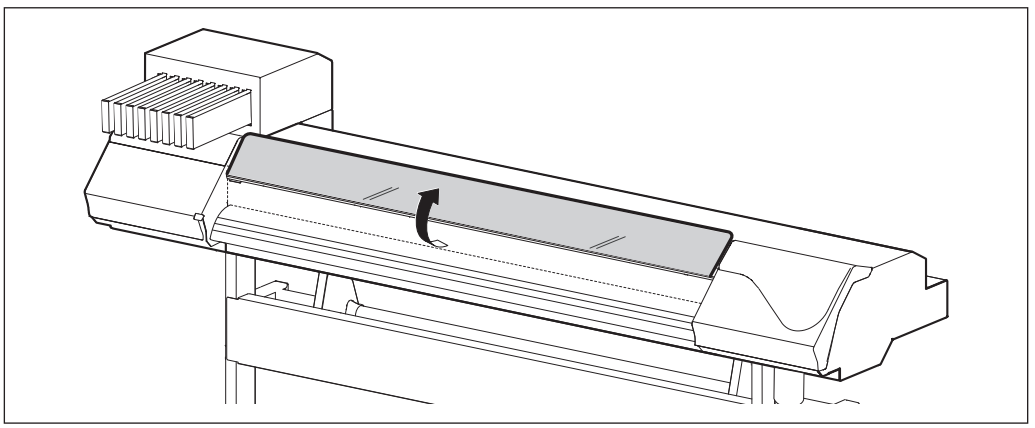
If roll media is allowed to stand unused in a loaded state for an extended period, the media may sag. This can cause poor print quality and motor errors, so be sure to remove and store such media when not in use.

Loading the Sheet Media

Procedure

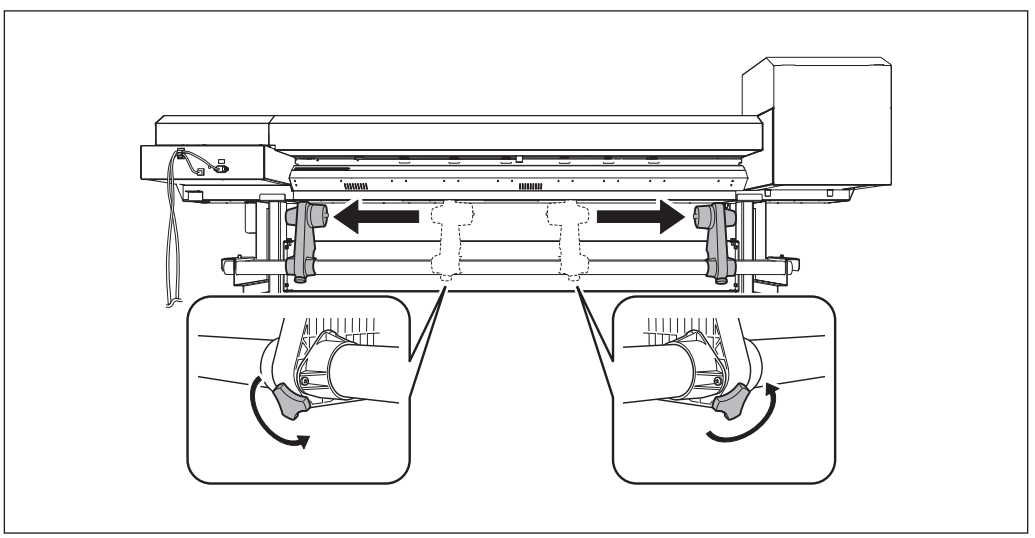
❶ Open the front cover.

Keep the front cover open until instructed.



❷ Move the media holders to the left and right.

Move them to a location where they don't disturb the media when the media is hung down from the rear of the machine. If they disturb the media, remove them with the shafts. For information on how to remove, refer to "Setup Guide."

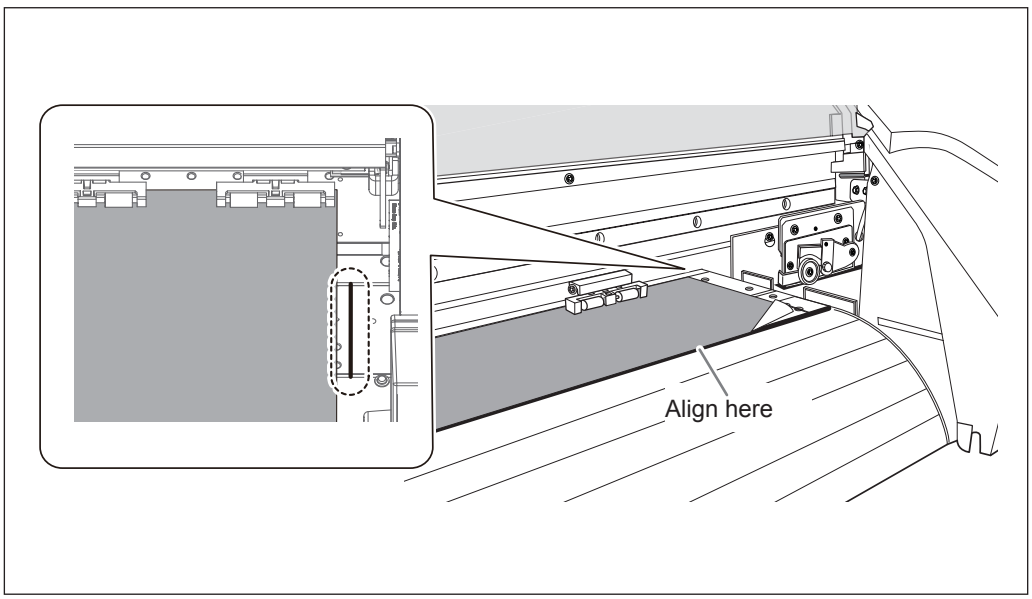


❸ Pass the media through the machine.

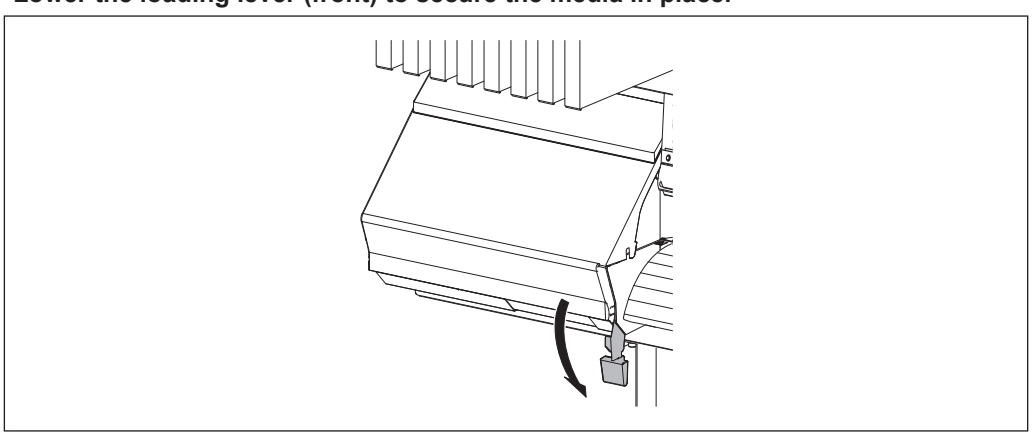
☞ Procedure 2 ❶ to ❹ of P. 24, "Pass the media through the machine and secure the media holders."

4 Align the front edge of the media with the location shown in the figure.

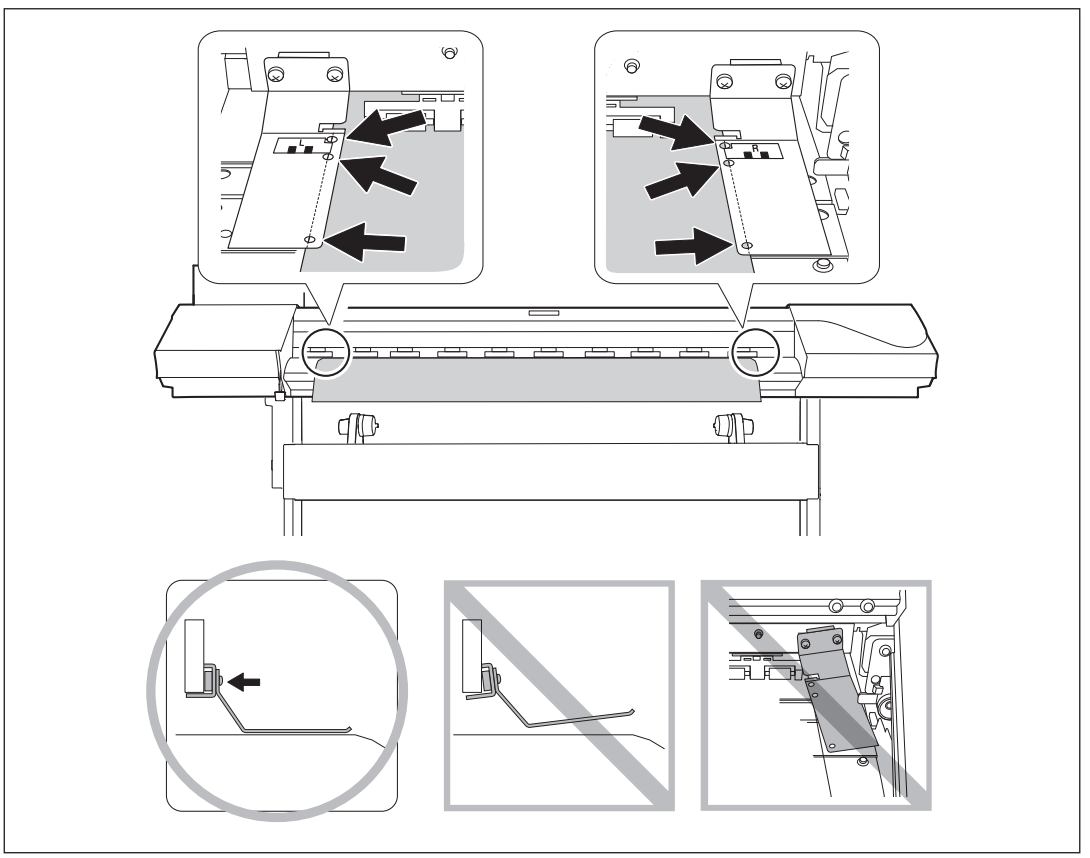
Confirm that the right edge of the media is aligned with the guideline.



5 Lower the loading lever (front) to secure the media in place.



6 **① Attach the media clamps.**
② Align the centers of the holes of the media clamps with the both edges of the media.
The media clamps are magnetic, and the left and right clamps are distinct. Refer to the figure and install them at the correct positions, taking care not to let the left and right clamps get mixed up.



7 **Close the front cover.**
When the front cover is closed, the print-head carriage moves and detects the width of media. This operation is called initialization. When initialization ends, SETUP remains steadily lighted, and the printable width is displayed on the screen. This completes loading of the media.

Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)

Perform the initial adjustment of this machine. In the following cases, perform this adjustment.

- When using this machine for the first time
- When changing the media to use
- When further correction is required to improve printing, such as when simple correction is performed for misalignment in bidirectional printing (☞ P. 84, "Correcting for Misalignment in Bidirectional Printing")

Procedure

❶ **Press** (MENU).

❷ MENU / ADJUST BI-DIR ◀▲▼▶

Press (▼) several times until the screen on the left appears.
Press (►), and then (▲).

❸ ADJUST BI-DIR / DETAIL SETTING ◀▲▼▶

Press (►).

❹ DETAIL SETTING / TEST PRINT ◀▲▼↵

Press (ENTER).
A test pattern is printed.
When printing ends, then press (▼).

❺ ADJUST BI-DIR / SETTING ◀▲▼▶

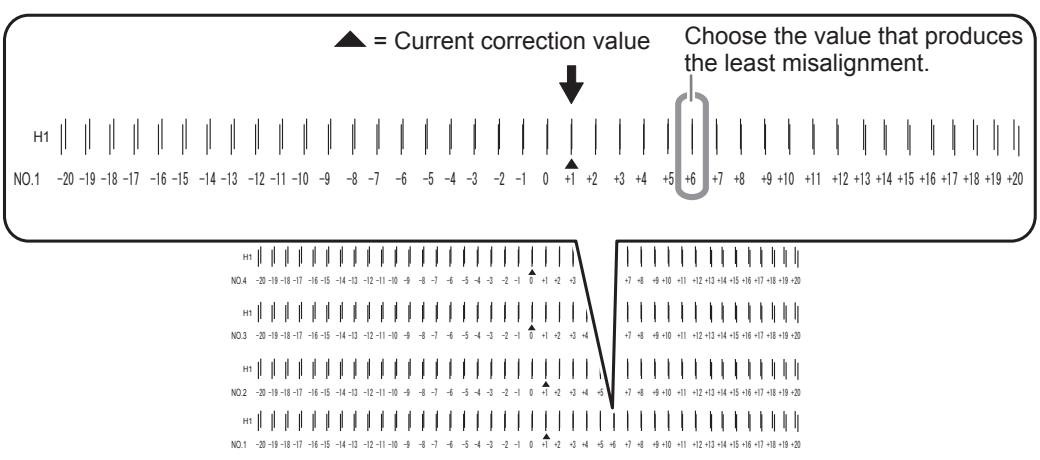
Press (►).

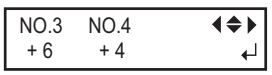
❻ NO.1 - 6 NO.2 - 4 ◀▲▼▶↵

Press (▲) (▼) to select a correction value of No.1.
Press (►).
Press (▲) (▼) to select a correction value of No.2.
Press (►).

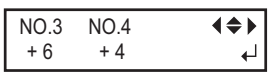
To decide a Correction Value

Choose the value that produces the least misalignment of 2 lines. When wavering between two numbers, select half value.



7 

Press ▲ ▼ to select a correction value of No.3
Press ►.
Set correction values of No.4 in the same manner.
Perform the setting up to NO. 8 for the water-based ink model in the RF-640A.

8 

When correction value settings end, press ENTER.

9 **Press MENU to go back to the original screen.**

Setup of Media

About [Media Setting] Menu

To ensure the optimal printing according to the media size and type, various setting items are provided in this machine. This machine provides the [Media Setting] menu that guides these settings in the interactive mode. Using this menu, you can set all of the basic settings only by setting according to the instructions on the display screen.
Since the setting details can be stored as the preset menu, you can promote your operation efficiently saving the setup steps when using the same type of media. Once storing the basic settings as the preset, you can do fine adjustment according to need.
The items set through the [Media Setting] menu can be also set individually.

Setup of Media ([Media Setting] Menu)

*If any setting is not needed for each setting item, you can go to the next menu by selecting [NEXT].

1. Starting the [Media Setting] menu.

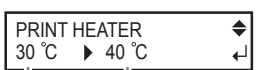
❶ **Load media.**
Check that no sagging is found on the media. If any sagging exists, the following correction value settings do not work effectively.
☞ P. 21, "Loading Media"

❷ **Press** (MENU).

❸

When the screen on the left appears, press (ENTER).

2. Setting the temperature of print heater and dryer.

❶


Current preset temperature — Temperature to be set

Press (▲) (▼) **to set the temperature.**
Recommended temperature: 40 °C (104 °F)
Press (ENTER) **to enable the setting.**

❷

Current preset temperature — Temperature to be set

Press (▲) (▼) **to set the temperature.**
Recommended temperature: 45 °C (113 °F)
Press (ENTER) **to enable the setting.**

For the individual setting method of this setting item and the description, refer to ☞ P. 79, "Making the Temperature Setting for the Media Heating System".

To cancel the setting

Procedure

❶ **Press (MENU) during the setting.**

❷

QUIT SETTING? ◀ ▶
YES [NO] ↵

Press (◀) to select [YES].
Press (ENTER).

MENU ◀ ◆
MEDIA SETTING ↵

The screen returns to the screen on the left.
By selecting [NO], the screen returns to the screen displayed when you press (MENU).

3. Adjusting the print head height

❶

HEAD HGT LOW ◀ ▶
[CHANGE] NEXT ↵

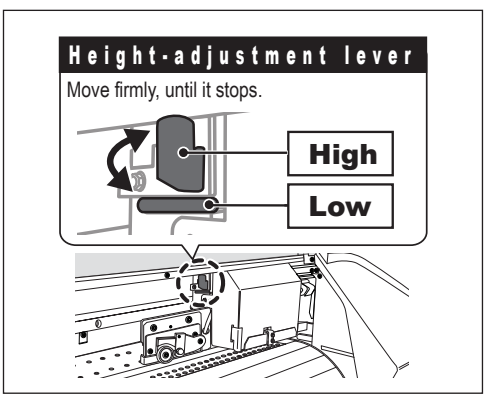
Press (◀) to select [CHANGE].
Press (ENTER) to enable the setting.

❷

HEAD HEIGHT
HIGH ▶ LOW ↵

When the screen on the left appears, open the front cover.

❸



Move the height-adjustment lever to adjust the print head height.
When moving to the [High] direction, the buzzer sounds twice, and to the [Low] direction, the buzzer sounds once.

POINT!

Normally set to [Low]. For the media that is wrinkled and comes loose from the platen, set to [High].

❹ **Close the front cover.**

For the individual setting method of this setting item and the description, refer to ☞ P. 87, "Adjusting Print Head Height to Match Media Thickness".

4. Perform the position correction of feed direction (alleviate horizontal stripes)

POINT!

Feed direction means the feed direction of the media. Perform the correction adjusting to the media in advance because horizontal stripes are more likely to occur during printing when the movement distance of the media changes subtly depending on the media's thickness.

❶ CALIBRATION
[SET] NEXT ↵

Press ◄ to select [SET].
Press ENTER to enable the setting.
The test pattern of feed correction is printed.

❷ INPUT
ADJ. VALUES ↵

When the screen on the left appears, press ENTER.

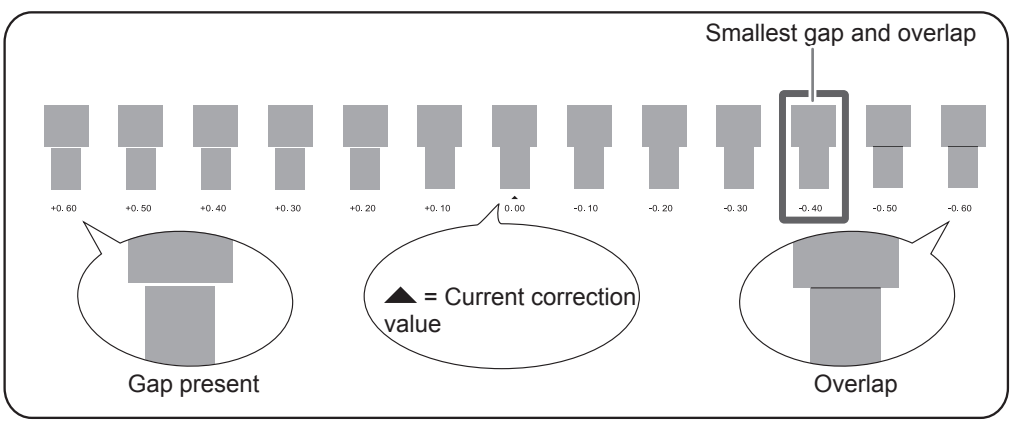
❸ CALIBRATION
0.10% ▶ -0.10% ↵

Current correction value Value to be set

Press ▲ ▼ to set the correction value.
Press ENTER to enable the setting.

To decide a Correction Value

Select the value to make the upper/lower rectangular gap and overlap smallest. When wavering between two numbers, select half value.



❹ REDO ADJ. ?
YES [DONE] ↵

[To confirm again/To adjust again]
Press ◄ to select [YES].
Press ENTER to enable the setting.
The test pattern of feed correction is printed again. Go back to the procedure ❸ and set again.

[To go to the next after correction is completed]
Press ► to select [DONE].
Press ENTER to enable the setting.

For the individual setting method of this setting item and the description, refer to ☞ P. 85, "Alleviating Horizontal Bands and the Like (Feed Correction Function)".

5. Performing the correction for misalignment in bidirectional printing

POINT!

This machine prints by the bidirectional mode (in which the print heads perform printing during both their outbound pass and return pass). This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten print time, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction."

❶

Press ◄ to select [SET].
Press ENTER to enable the setting.
The test pattern of bidirectional correction is printed.

❷

When the screen on the left appears, press ENTER .

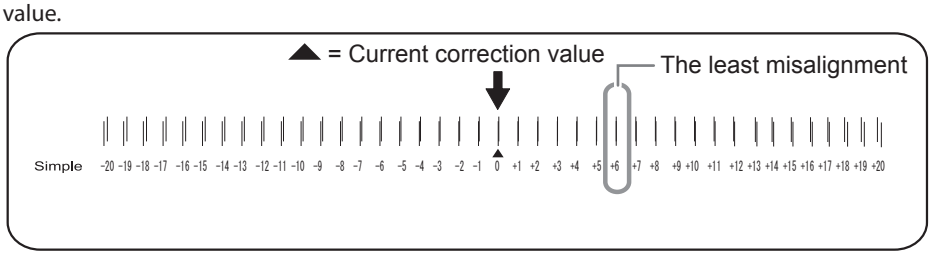
❸

Current correction value — Value to be set

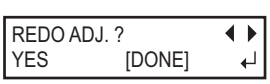
Press ▲ ▼ to set the correction value.
Press ENTER to enable the setting.

To decide a Correction Value

Choose the value that produces the least misalignment of 2 lines. When wavering between two numbers, select half value.



❹



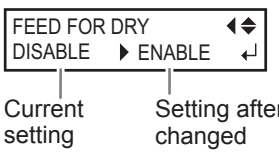
[To confirm again/adjust again]
Press ◄ to select [YES].
Press ENTER to enable the setting.
The test pattern of bidirectional correction is printed again. Go back to the procedure ❸ and set again.

[To go to the next after correction is completed]
Press ► to select [DONE].
Press ENTER to enable the setting.

For the individual setting method of this setting item and the description, refer to ☞ P. 84, "Correcting for Misalignment in Bidirectional Printing".

6. Setting the drying method and time after printing

❶



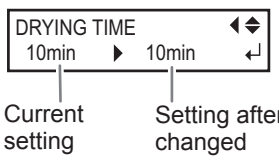
Press ▲ ▼ to select the setting.
Press ENTER to enable the setting.

POINT! Drying Method after Printing

After the 1st page is printed, set that the media should be fed until the trailing edge of the printed area is positioned directly on the dryer. To make sure to dry the entire printed area, select [ENABLE]. If [DISABLE] is selected, the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.

For the individual setting method of this setting item and the description, refer to ☞ P. 82, "Drying the Trailing Edge of the Printing Area on the Dryer".

❷



Press ▲ ▼ to set the drying time.

Example of setting time (general guide):

* The setting time varies according to the type of media and the setting of printing quality.
Condition: Non-coated vinyl media
Setting time: About three minutes

Press ENTER to enable the setting.

POINT! Drying Time after Printing

Set the drying time after the 1st page is printed. The next operation is not started until the set time passes.

For the individual setting method of this setting item and the description, refer to ☞ P. 82, "Setting the Drying Time After Printing".

7. Saving the setting as preset

❶

Press ◄ to select [SAVE].
Press ENTER to enable the setting.
If you select "NEXT", the screen of ❹ appears and all settings you have made are not saved as a preset. However, they remain as the current settings in the machine.

❷

Use ▲ ▼ to select [Destination to Save].
You can select one of NAME1 to 8.
Press ENTER to enable the setting.

❸

Use ▲ ▼ to select characters.
Use ► to move the next character.
Select the following characters in the same way.
You can enter up to 15 characters.
Press ENTER to enable the setting.

❹

Press ENTER to go back to the original screen.

For the individual setting method of this setting item and the description, refer to ☞ P. 76, "Fully Utilizing Preset Function"

This completes the operation of the [Media Setting] menu.

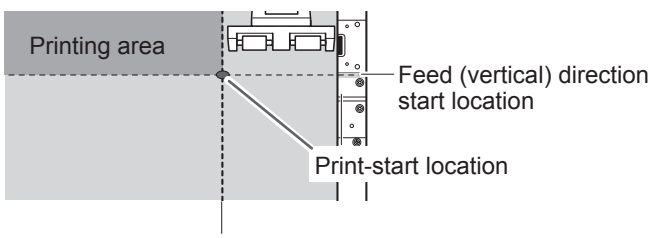
Setting the Print-Start Location

You can set the print-start location at any location you prefer. (You can print even if you do not set this.) Note, however, that this setting must be made for each individual page.

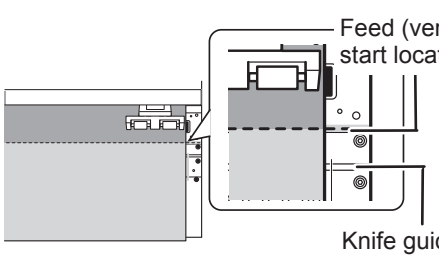
Procedure

1 **Press ▲ ▼ ◄ ► to move the media and the print-head carriage.**
If you press a cursor key, preparation operation to move the media or the print-head carriage starts. After the operation finishes, move the media and the print-head carriage to the location where you start the print.

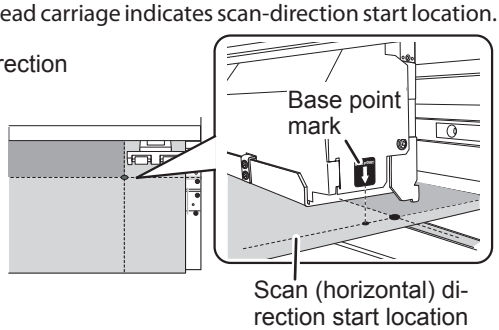
The settings of feed-direction and scan-direction locations determine the print-start location.



Feed-direction start location
Move the media to adjust the feed direction.



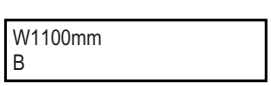
Scan-direction start location
The base point mark on the right side of the print-head carriage indicates scan-direction start location.



2 **When the location is set, press FUNCTION.**

3

When the screen on the left appears, press ENTER to enable the setting.



BASE remains steadily lighted and when the screen displays the character "B" together with the print-possible width at the location, setting is completed.

POINT!

Note, however, that the left and right positions are not restored to their defaults for test patterns.
If you're using the separately available media take-up system, never adjust by pressing ▲.
Doing so may pull the media with undue force, resulting in an error or malfunction.

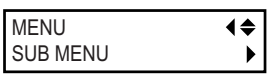
Printing Tests and Cleaning

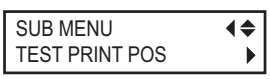
Before you carry out actual printing, we recommend performing a printing test to ensure no dot drop-out occurs. If dot drop-out occurs, perform cleaning of the print heads (Normal Cleaning).

1. Setting a test print direction

* The factory default setting of the test print direction is "FEED." When performing printing tests successively, you can select "FEED" or "SCAN" as the print direction applied to the second and later tests. However, when the optional media take-up system is used, "Feed" is applied regardless of the setting of the test print direction.

☞ P. 96, "Use the Media Take-Up System"

1. **Press MENU.**
2. 

Press ▼ several times until the screen on the left appears.
3. 

Press ►, and then ▲ to display the screen on the left.
Press ►.
4.

Press ▲ ▼ to select "SCAN."
Press ENTER to enable the setting.
5. **Press MENU to go back to the original screen.**

2. Perform a printing test

1. **Setting the Print-start Location.**

☞ P. 39, "Setting the Print-Start Location"

POINT!

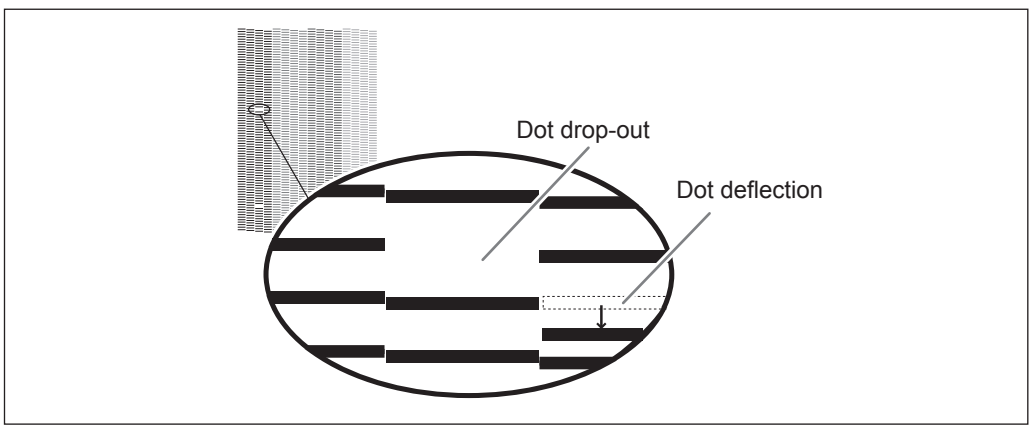
When performing the tests successively, you don't need to set the print-start location for the second and later tests. However, if one of the followings is conducted, the default print-start location takes effect. Set the desired print-start location again as necessary.

- Cutting of sheet
- Printing of data you created
- Cancellation of media loading

❷ **Press** (FUNCTION).

❸
```
FUNCTION
CLEANING
```
Press (►).

❹
```
CLEANING
TEST PRINT
```
Press (ENTER).
A test pattern is printed.



❺ **If no dot drop-out or no dot deflection occurs, press (FUNCTION) to go back to the original screen. If dot drop-out or dot deflection occurs, go to procedure *3*.**

3. Perform a normal cleaning

❶ **Press** (▼).

❷
```
CLEANING
NORMAL
```
Press (ENTER).
Normal cleaning starts.

```
CLEANING...
>>
```

```
CLEANING
NORMAL
```
When it finishes, the screen on the left appears again.

❸ **Press (FUNCTION) to go back to the original screen.**

❹ **Perform a printing test on procedure *2*. again to make sure the dot drop-out or dot deflection has been corrected.**
If the problems persist, try performing cleaning a second time. If the machine has been used for a long period, the problems may persist even after two or three-cycle cleaning. Then try cleaning using a different method.

☞ P. 55, "When Normal Cleaning Is Not Effective"

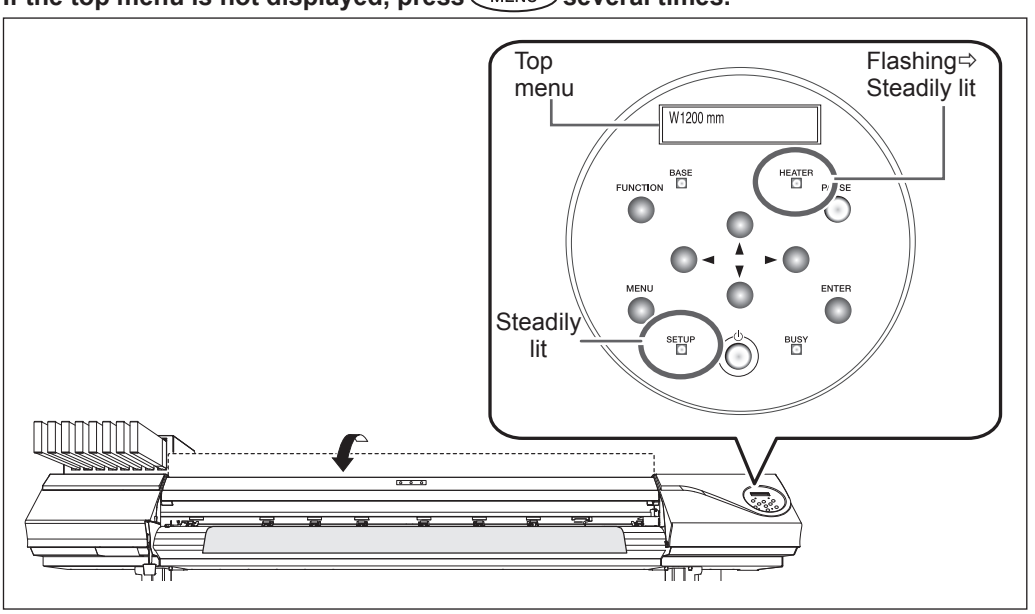
Getting Ready to Receive Data from a Computer

When ☞ P. 21, "Loading Media", ☞ P. 33, "Setup of Media" are completed, get ready to receive the data from a computer.

⚠CAUTION **Never touch the print-head carriage while print is in progress.**
The print-head carriage moves at high speed. Contact may cause injury.

Procedure

1. **Close the front cover.**
2. **Make sure [SETUP] stays steadily lit.**
   If the light does not come on, lower the loading lever.
3. **Wait until [HEATER] stays steadily lit.**
4. **Make sure the top menu is displayed.**
   If the top menu is not displayed, press (MENU) several times.



POINT!

Printing is not possible in these situations.
- The machine does not run when the front cover is open.
- Never open the front cover when printing is in progress. Doing so interrupts printing.
- Data from the computer is not accepted when [SETUP] is dark.
- When "ON" is set to the print heater and/or the dryer, printing does not start until [HEATER] lights up.
- Data from the computer is not accepted when you are not at the top menu.

Starting Printing

When the operation of ☞ P. 42, "Getting Ready to Receive Data from a Computer" is completed, you can start printing. To print, the following procedures are required.

① Creating print data

Create the print data using the application software like Adobe Illustrator and like that. For information on how to create the data, refer to the documentation of your application software.

② Sending the print data to this machine using software RIP.

For information on how to install and use software RIP, refer to the documentation of your software RIP.

IMPORTANT! Points that must be observed

- Be sure to set the media clamps during printing. Otherwise the edges of the media may warp and catch on the print heads.
- During printing, never touch the media. Doing so may obstruct media feed or cause the media to rub against the print heads, which may result in a paper jam or damage to the print heads.
- Keep the loading lever raised when the machine is not in use.

POINT!

If Ink Runs Out

When ink runs out, a warning beep sounds and a slot number of which ink runs out is displayed on the display screen. Exchange the ink cartridge.

☞ P. 49, "How to Replace Ink Cartridges"

Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges.

Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges. When ink runs out and printing is paused, the coloring at the seam may be altered when printing resumes.

☞ P. 48, "Checking for Remaining Ink"

Pausing and Canceling Printing

You can pause and cancel printing before it finishes. We do not recommend resuming printing because horizontal stripes are produced at the place where printing stopped.

Procedure

1. **Press (PAUSE) before printing finishes.**
   This pauses print operation.
   Press (PAUSE) again to resume printing.
   To cancel the print, go to the next procedure without pressing (PAUSE) in this procedure.

2. TO CANCEL, HOLD DOWN PAUSE KEY

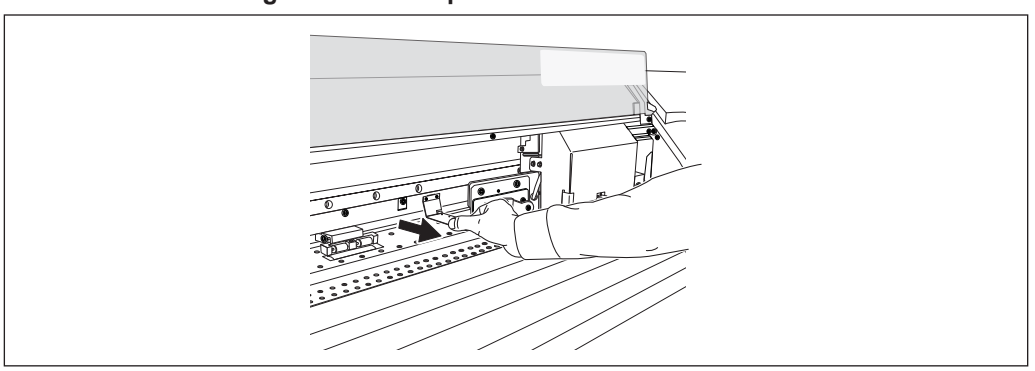
   When the screen on the left appears, hold down (PAUSE) for one second or longer.
   This cancels printing operation.

3. **Stop sending the print data from the computer.**

Cutting Off the Media

Procedure

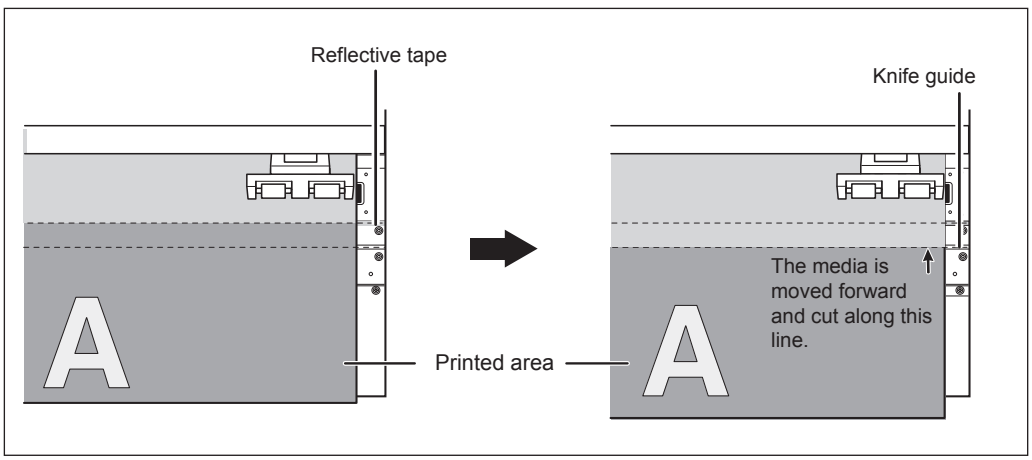
1. **Detach the left and right media clamps.**



2. **Close the front cover.**
3. **Make sure [SETUP] lights up.**
4. **Press (FUNCTION).**

❺ FUNCTION
SHEET CUT

Press ▼ to display the screen on the left.
Press ENTER .
The media is cut off.



You can make the setting in the software RIP for automatic media cutoff after printing has finished. For information on how to make the setting, refer to the documentation of the software RIP you're using.

IMPORTANT! Cut-off Operations

REMOVE
MEDIA CLAMPS

When the media clamps are attached, the screen on the left appears. Open the front cover and detach the left and right media clamps and press ENTER .

- Be sure to detach the media clamps. Performing cutoff with the media clamps remaining attached may cause the operation to be interrupted due to detection of the media clamps.
- If the media clamps are present on the machine when the setting to execute automatic cutoff of the media is made on the RIP software, the media clamps are detected and no cutoff operation is performed.
- Before you're performing cutoff, never use ▲ to pull the media back. Unless the end of the media has been pulled out to a location to the front of the platen, cutoff may not be performed smoothly.

IMPORTANT! Give Attention to Media Composition

- For some types of media, cutoff is not possible.
- Some types of media may remain on the platen after cutoff. If the media remains on the platen, remove it by hand.

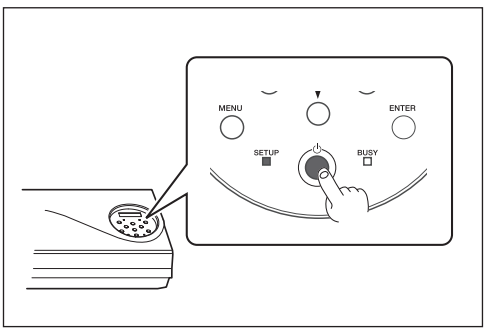
Switch Off

Switch Off

⚠WARNING **When print is not being performed, remove any loaded media or switch off the sub power.**
The continued application of heat at a single location may cause the release of toxic gases from the media or pose a fire hazard.

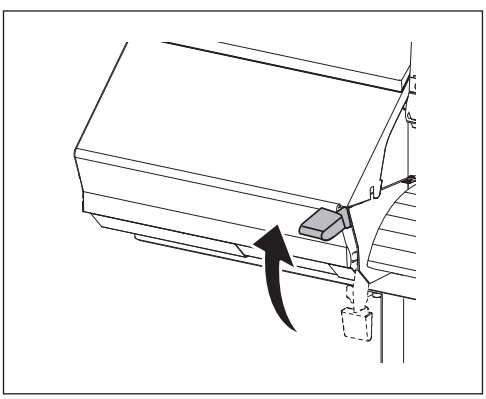
Procedure

❶



Switch off the sub power whenever printing is finished.
Hold down the sub power button for one second or longer.

❷



Raise the loading lever and remove the loaded media.
Raise the loading lever when the machine is not used even if the power is not turned off.

IMPORTANT!

Leave the main power switched on at all times.
Never switch off the main power. By switching on the main power, the automatic maintenance function is carried out periodically. If the automatic maintenance is not carried out, it may result in breakdown of this machine such as breakdown of the print heads.

Never switch off the main power or unplug the power cord suddenly while operation is in progress.
Switching off the main power or unplugging the power cord suddenly while operation in progress may damage the print heads. Be sure to first switch off the sub power.
If the main power is accidentally switched off, immediately turn the power back on.

Chapter 3
Maintenance:
For always in the best condition

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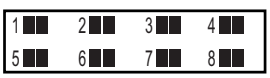
Checking for Remaining Ink

Procedure

1. **Press MENU.**

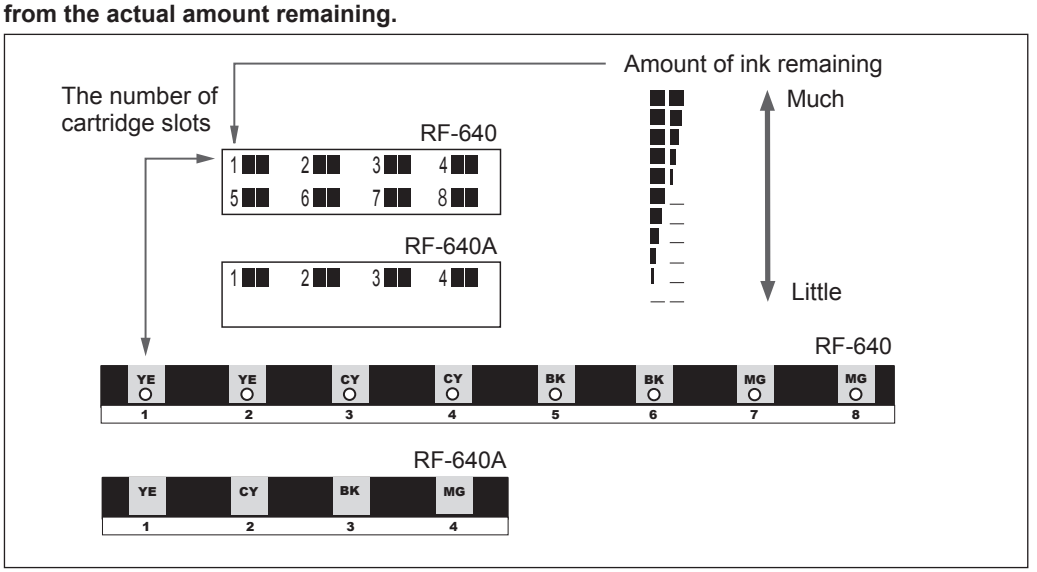
2.

Press ▲ several times until the screen on the left appears.
Press ►.



■ indicates the amount of ink remaining. When there are more ■, the amount of ink remaining is larger.

*** The screen shows an approximate guide to the amount of remaining ink. It may differ somewhat from the actual amount remaining.**



3. **Press MENU to go back to the original screen.**

How to Replace Ink Cartridges

When ink runs out, a warning beep sounds and printing pauses (unless the default settings have been changed). (In the RF-640, a warning beep sounds and printing pauses when ink in the both two ink cartridges of the same color runs out.) Pull out the empty ink cartridge and insert a new one quickly. Printing resumes.

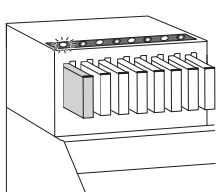
Procedure

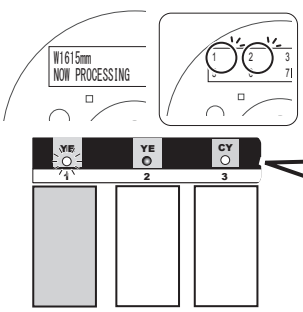
1 Pull out the empty ink cartridge.

In the RF-640, printing is continued with [NOW PROCESSING] displayed in the display screen when ink in either one ink cartridge of the two ink cartridges of same color runs out during printing. Refer to the LED to pull out the empty ink cartridge.

The slot numbers for the empty ink cartridges flash in the display screen when ink in the both two ink cartridges of the same color runs out.

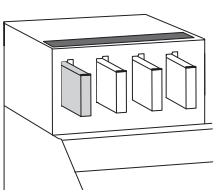
RF-640

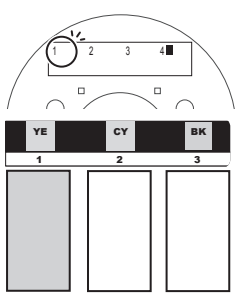




LED	
ON	It indicates the ink cartridge is being used.
FLASH	It indicates the ink cartridge is empty / ink cartridge is not inserted.
OFF	It indicates the ink cartridge is not being used.

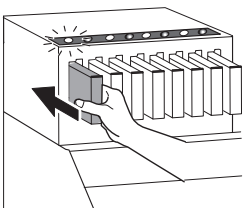
RF-640A



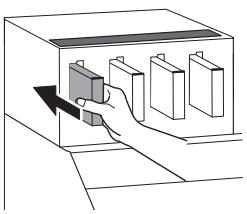


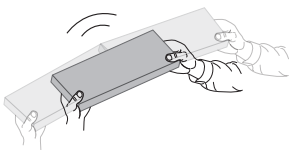
❷ Insert a new ink cartridge.

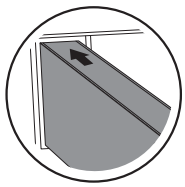
RF-640



RF-640A







- Shake a new cartridge gently before you install it.
- Keep the side with the arrow face up.

IMPORTANT! **Important Notes on Replacing Cartridges**

- Insert and remove slowly, one at a time.
- Insert firmly, as far as it will go.
- Be sure to replace with an item of identical type and color.
- Never use an ink cartridge which has already been used in other machines even if it is the identical type.
- Never mix items of different types.
- Never allow the machine to stand with an ink cartridge removed.
- Never insert or remove a partially used ink cartridge.
- Never remove an ink cartridge suddenly while the machine is in operation.

⚠WARNING **Never store ink, cleaning liquid, or discharged fluid in any of the following locations.**

- Any location exposed to open flame
- Any location where high temperature may occur
- Near bleach or any other such oxidizing agent or explosive material
- Any location within the reach of children

Fire may be a danger. Accidental ingestion by children may pose a health hazard.

Discard Discharged Fluid

EMPTY DRAIN BOTTLE ↵

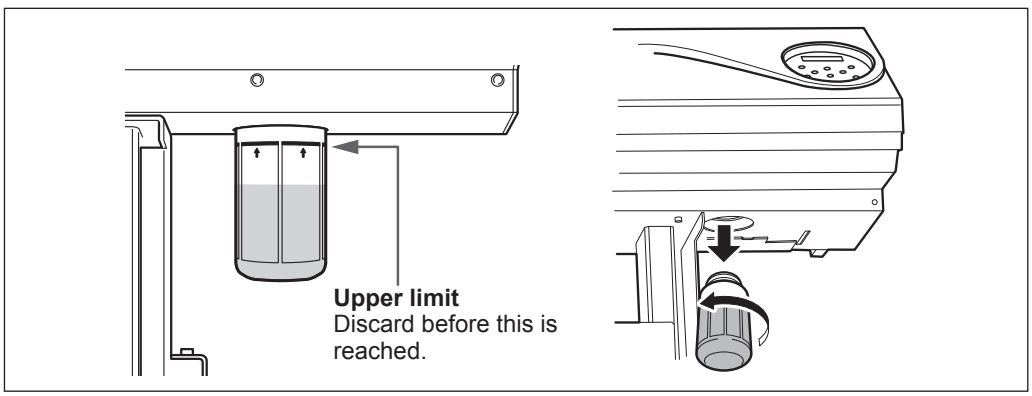
The drain bottle collects discharged fluid. Discard collected discharged fluid before the drain bottle becomes full. The screen appears when a certain amount of discharged fluid has collected in the drain bottle. Follow the procedure below to discard the discharged fluid.

Procedure

❶

EMPTY DRAIN BOTTLE ↵

When the screen on the left appears, detach the drain bottle and discard the discharged fluid to empty it.
After discarding the discharged fluid, you must promptly attach the drain bottle to the machine.



⚠CAUTION

Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE."
After discarding the discharged fluid, promptly attach the drain bottle to the machine.
Failing to follow this procedure may cause discharged fluid to flow out of the machine and spill, soiling your hands or the floor.

❷

NOW EMPTY? ◆▶ [YES] NO ↵
↓
W1200mm SETUP SHEET

Press ENTER to display the screen on the left.
Press ◄ ► to select [YES].
Press ENTER .

The display goes back to the original screen.

If you select [NO] without discarding discharged fluid:
This also allows you to go back to the original screen. The [EMPTY DRAIN BOTTLE] message disappears temporarily. When a certain amount of discharged fluid has been collected in the drain bottle, the message appears again.

⚠CAUTION

When the [EMPTY DRAIN BOTTLE] message appears on the screen, discard discharged fluid.
Repeatedly selecting [NO] without discarding the discharged fluid may cause it to spill out of the drain bottle, soiling your hands or the floor.

When You Cannot Check Discharged Fluid Level in Drain Bottle

POINT!

Splashed ink inside the drain bottle surface may not allow you to easily check the amount of discharged fluid in the drain bottle. If the inner surface is not visible, clean the drain bottle in the following way when discarding the discharged fluid.

- Clean the inside of the drain bottle using the included cleaning stick. (Cleaning sticks cannot be reused.)
- If the method described above does not work well, try the following method.

Procedure

1. **Detach the drain bottle to be cleaned from the machine, and attach the other drain bottle included as an accessory to the machine.**
2. **When discarding the discharged fluid of the detached drain bottle, let the fluid remain in the drain bottle by 2 to 3 cm from the bottom.**
3. **Firmly tighten the cap of the drain bottle.**
4. **Lay down the drain bottle and roll it so that all the inner surface is wet with the remaining discharged fluid.**
5. **Place the drain bottle upright and leave it as it is for 1 to 2 hours.**
6. **If the splashes still remain, repeat steps 4 and 5.**
7. **Discard the fluid.**

⚠WARNING **Never place discharged fluid and ink near open flame.**
Doing so may cause fire.

⚠CAUTION **To store discharged fluid temporarily, place it in the included drain bottle or in a durable sealed container such as a metal can or polyethylene tank, and cap tightly.**
Any spillage or vapor leakage make cause fire, odor, or physical distress.

Discard discharged fluid properly, in accordance with the laws in effect in your locale.
Discharged fluid is flammable and contains toxic ingredients. Never attempt to incinerate discharged fluid or discard it with ordinary trash. Also, do not discard it in sewer systems, rivers, or streams. Doing so may have an adverse impact on the environment.

Cleaning

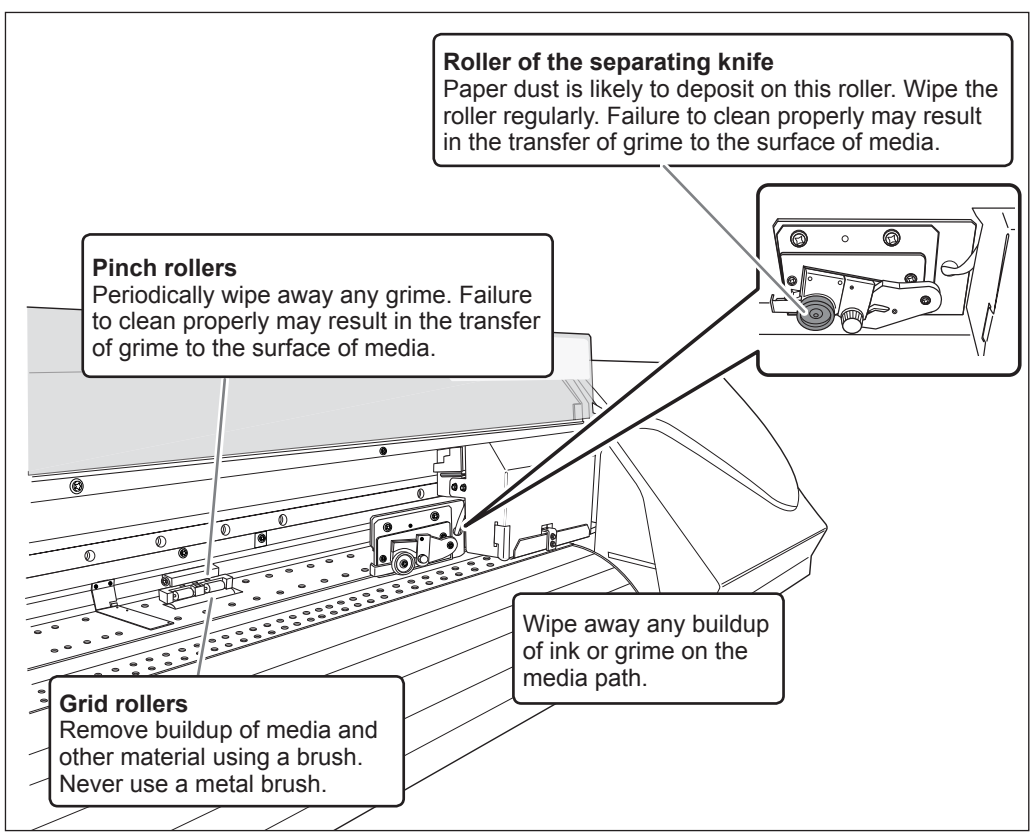
⚠WARNING **Never use gasoline, alcohol, thinner, or any other flammable material.**
Doing so may cause fire.

⚠CAUTION **Before attempting cleaning, switch off the sub power and wait until the platen and dryer cool (approximately 30 minutes).**
Sudden movement of the machine may cause injury, or hot components may cause burns.

Wipe away any buildup of ink or grime on the media path and other locations as daily cleaning. In particular, the pinch rollers, grid rollers, and platen are likely to get a buildup of grime. Clean by wiping with a cloth moistened by neutral detergent diluted with water then wrung dry.

POINT!

- This machine is a precision device, and is sensitive to dust and dirt. Perform cleaning on a daily basis.
- Never attempt to oil or lubricate the machine.



About Care and Maintenance of Print Heads

Care of the print heads are essential to ensuring optimal printing at all times. There are daily care and periodic care.

Daily Care and Maintenance

- **Printing tests and normal cleaning**
  It is recommended to perform the printing test and the normal cleaning before daily operation.
  ☞ P. 40, "Printing Tests and Cleaning"

Cleaning at Occurrence of Uneven Color Issue

- **Light Choke Cleaning**
  Perform this cleaning when color is uneven and unstable, i.e. darkness or brightness is different although the same data is printed with the same settings.
  ☞ P. 56, "When Uneven Color Issue Occurs"

Periodic Care and Maintenance

- **Medium cleaning/Powerful cleaning**
  Perform the medium cleaning or powerful cleaning when the problems such as dot drop-out are not cleared up by the normal cleaning.
  ☞ P. 55, "Medium / Powerful Cleaning"
- **Manual Cleaning**
  Based on your frequency of use, perform the manual cleaning periodically.
  ☞ P. 59, "Manual Cleaning"

* The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Purchase them from your authorized Roland DG Corp. dealer or us.

When Normal Cleaning Is Not Effective

Medium / Powerful Cleaning

When the problems such as dot drop-out are not cleared up by the "normal cleaning" (P. 40, "Printing Tests and Cleaning"), try the more forceful "medium cleaning." If the condition is not improved, try the even more forceful "powerful cleaning."

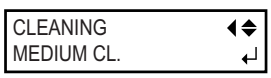
> **POINT!**
> The medium and powerful cleaning consume more ink than normal cleaning, and too-frequent use may damage the print heads themselves. Avoid using them more than necessary.

Procedure

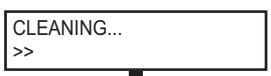
1. **Press FUNCTION.**

2.

Press ►.

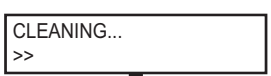
3. 

Press ▲ ▼ to select "Medium."
When "Medium" is not effective, select "Powerful."
Press ENTER to enable the setting.

4. 

"Medium"
The screen on the left appears and cleaning starts.

When it finishes, the screen on the left appears again.



"Powerful"
The screen on the left appears and cleaning starts.

When it finishes, the screen on the left appears again.

5. **Press FUNCTION to go back to the original screen.**

When powerful cleaning is not effective

When the problems such as dot drop-out are not cleared up even by performing powerful cleaning several times, perform "Manual Cleaning." Such cleaning can be effective when carried out periodically, according to the frequency of use.

☞ P. 59, "Manual Cleaning"

When Uneven Color Issue Occurs

Light Choke Cleaning

POINT!

Light choke cleaning consumes a large amount of ink. Frequently performing light choke cleaning makes the print heads more likely to be damaged. Avoid using it more than necessary.

If nothing is printed for an extended period, color may be uneven and unstable, i.e. darkness or brightness is different though the same data is printed with the same settings. In that case, perform the light choke cleaning. To obtain stabilized print color, stir the ink.

Procedure

1. **Press** (MENU).

2. MENU / SUB MENU ◆▲▼ ▶
   Press (▼) several times until the screen on the left appears.
   Press (►).

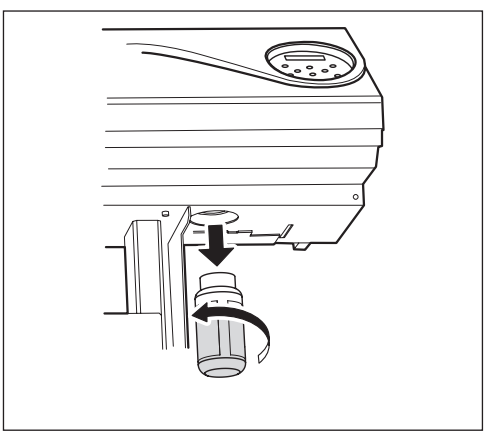
3. SUB MENU / INK CONTROL ◆▲▼ ▶
   Press (▲) several times until the screen on the left appears.
   Press (►), and then (▲).

4. INK CONTROL / LIGHT CHOKE CL. ◆▲▼ ↵
   Press (ENTER).

When the [EMPTY DRAIN BOTTLE] message appears on the screen:

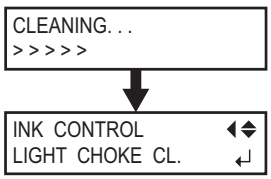
EMPTY
DRAIN BOTTLE ↵

When the message on the left appears, discard the discharged fluid. Attach the empty drain bottle to the machine again, and press (ENTER) to go to the next step.



⚠CAUTION **Be sure to discard the discharged fluid at this step.**
If you do not discard the discharged fluid at this step, the discharged fluid overflows from the drain bottle during the subsequent process.

⚠CAUTION **Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE."**
Failing to follow this procedure may cause discharged fluid to flow out of the machine and spill, soiling your hands or the floor.



The screen on the left appears.

When it finishes, the screen on the left appears again.

IMPORTANT!

Never remove ink cartridges during cleaning.

If an ink cartridge is removed during cleaning, the light choke cleaning will not be completed properly. In that case, refer to P. 120, "[CLEANING ERROR]" to recover from the error, and start from the beginning again.

5 Press (MENU) to go back to the original screen.

If the print color is still unstable after the light choke cleaning, contact your authorized Roland DG Corp. dealer or us.

When Manual-Cleaning Becomes Necessary

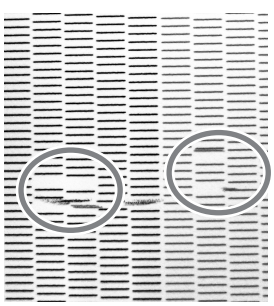
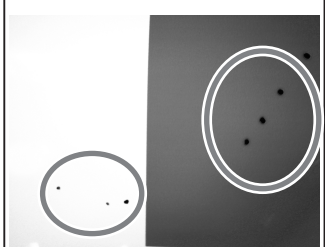
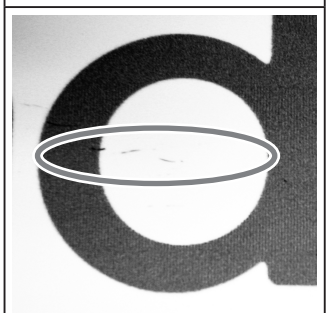
Perform the Manual Cleaning More Than Once a Month.

To keep the stable print condition at all times, perform the manual cleaning more than once a month. The manual cleaning takes approximately 10 minutes.

The Manual Cleaning Is Recommended When the Following Symptoms Occur.

It is recommended to perform the manual cleaning when any of the symptoms given below occurs and it cannot be solved by the automatic cleaning functions such as the normal cleaning.
For your information, replacement of the wiper or felt wiper is also effective to improve the symptoms.

☞ P. 66, "Replacing the Wiper"
☞ P. 69, "Replacing the Felt Wiper"

Dot drop-out or deflection	Ink drips	Dragging dirt
		
Flaws in the dot pattern are caused by dust on the print heads.	Ink that has adhered to a dirty or dusty print heads drips onto the media.	When dirt or dust accumulates on the print heads, it can interfere with image quality.

- When the cleaning stick and cleaning liquid for the manual cleaning run out, purchase them from your authorized Roland DG Corp. dealer or us.
- The print heads are components that wear out. Periodic replacement is required, with the frequency of replacement depending on use. Purchase them from your authorized Roland DG Corp. dealer or us.

Manual Cleaning

IMPORTANT!

Important Notes on This Procedure

- Before attempting this operation, remove any media.
- To prevent the print heads from drying out, finish this procedure in 30 minutes or less. A warning beep sounds after 30 minutes.
- Never use any implement other than the included cleaning stick. Cotton swabs or other lint-producing items may damage the print heads. If you use up the cleaning stick, purchase a new one from your authorized Roland DG Corp. dealer or us.
- Use one cleaning stick per cleaning session, then discard the stick after use. Reusing cleaning sticks may reduce printing quality.
- Do not put the cleaning stick used for cleaning into the cleaning liquid. It will deteriorate the fluid.
- Never rub the nozzle surface of the print heads.

When a warning beep sounds during cleaning

A warning beep sounds in 30 minutes after the operation is started. At this time, stop work, and follow the procedure *3* (P. 62) to attach cover L and cover R, then close the front cover. Press ENTER to quit the manual-cleaning menu. After that, restart the procedure from the beginning.

⚠CAUTION **Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.**
Sudden movement of the machine may cause injury.

Necessary items

Cleaning liquid

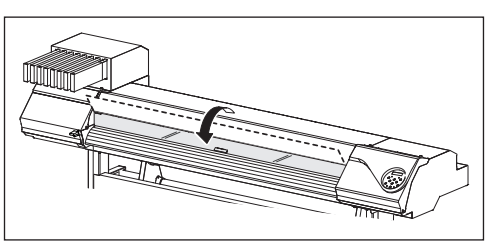
Cleaning stick

*In the RF-640A, the cleaning liquid is not packed with the machine. Regarding the purchase, contact your authorized Roland DG Corp. dealer or us.

1. Enter the manual-cleaning menu.

❶ **Remove any media.**

❷



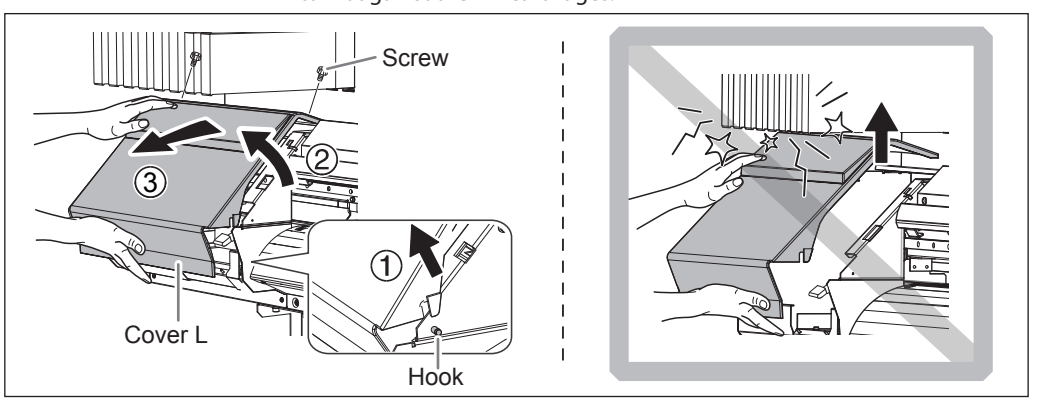
Close the front cover.

❸ **Press** FUNCTION **.**

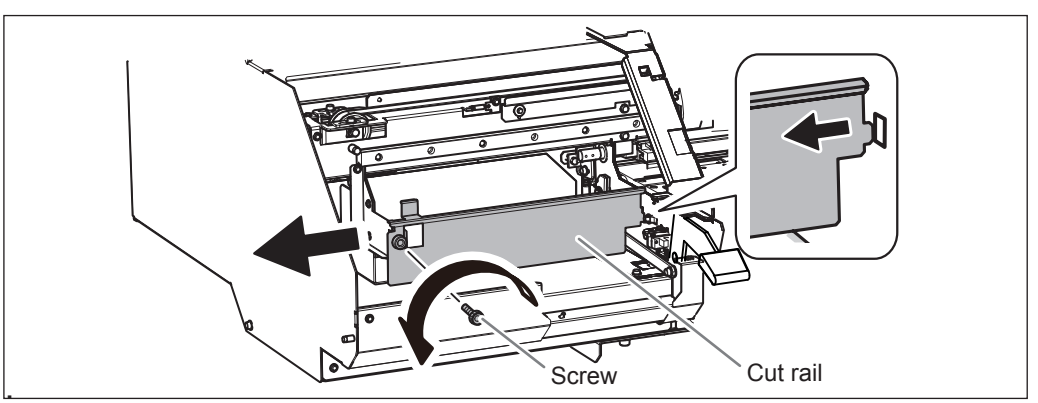
❹
```
FUNCTION
CLEANING
```
Press ► **.**

❺
```
CLEANING
MANUAL CL.
```
Press ▲ ▼ **to select "MANUAL CL."**
Press ENTER **.**

❻
```
OPEN COVER L
```
When the screen on the left appears, remove the cover L.
Pull the cover L toward you and remove it. Just raising the cover allows it to hit against the ink cartridges.

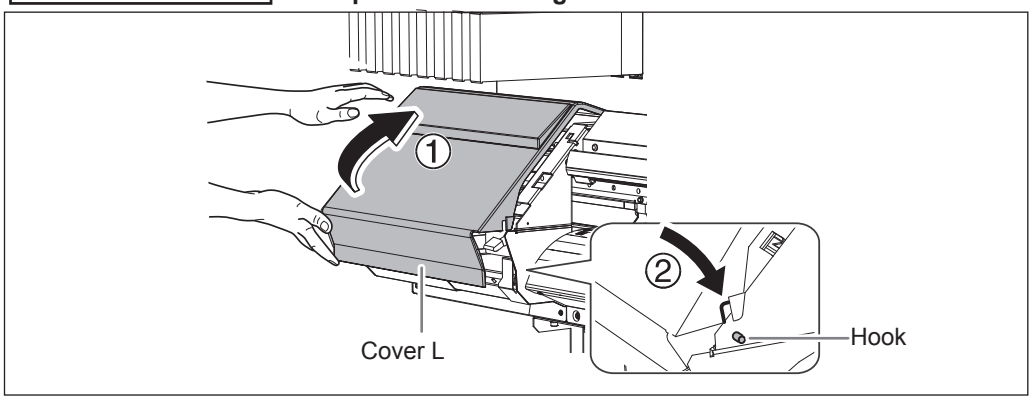



```
REMOVE CUT
       RAIL
```
Remove the cut rail.
Press ENTER **.**



❼ CLOSE COVER L

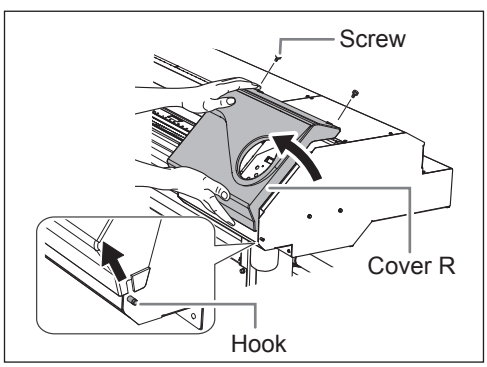
Attach the cover L.
The print-head carriage moves to the left of the machine.



❽ OPEN COVER L

Remove the cover L.

❾



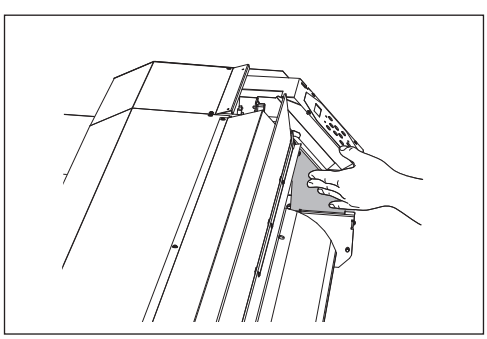
Remove the cover R.

❿ FINISHED? ↵

Preparations are complete when this screen appears.

2. Clean using the cleaning stick.

❶

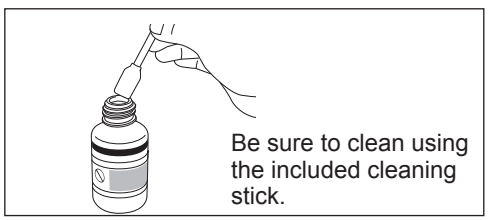


Touch the location shown in the figure to discharge any static electricity.

❷ **Check that the cut rail has been removed.**

If the cut rail is not removed, close all the covers and restart the operation from the beginning. If you continue the operation as the cut rail remains attached, the print heads might get broken.

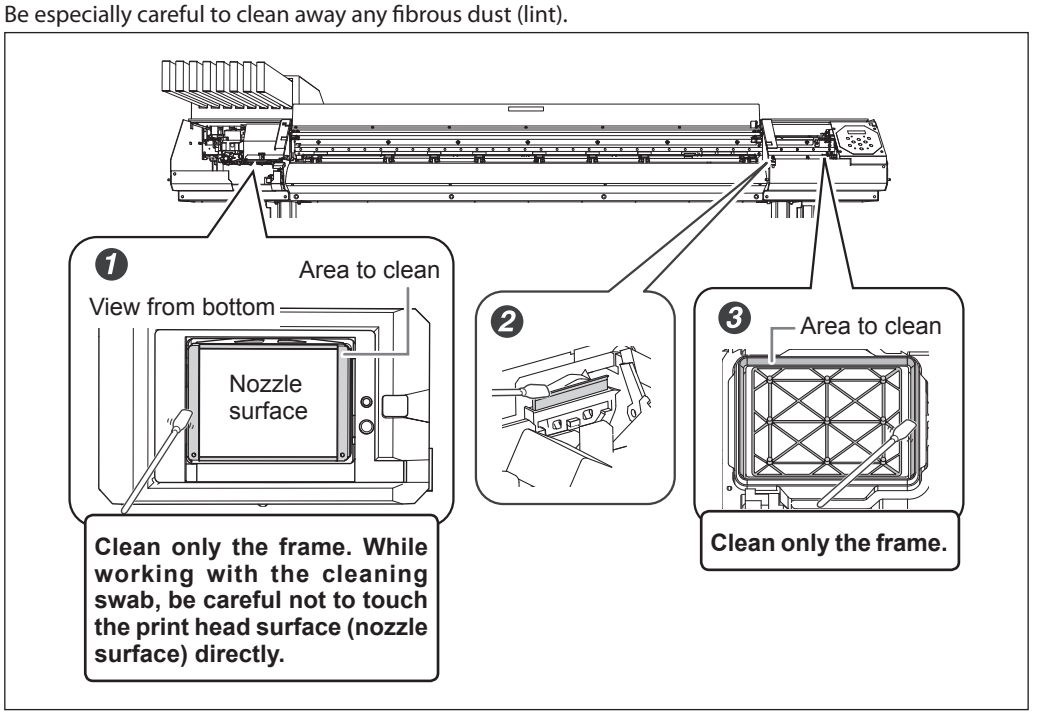
❸



Moisten the cleaning stick with the cleaning liquid.

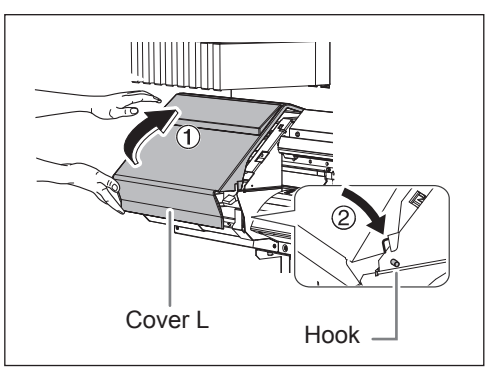
❹ **Perform cleaning in the sequence shown in the figure below.**

Be especially careful to clean away any fibrous dust (lint).



3. Reattach the cover L and R, and finish the manual cleaning menu.

❶



Attach the cover L.

❷ **Attach the cover R.**

❸ **Press** ENTER **.**

❹ OPEN COVER L

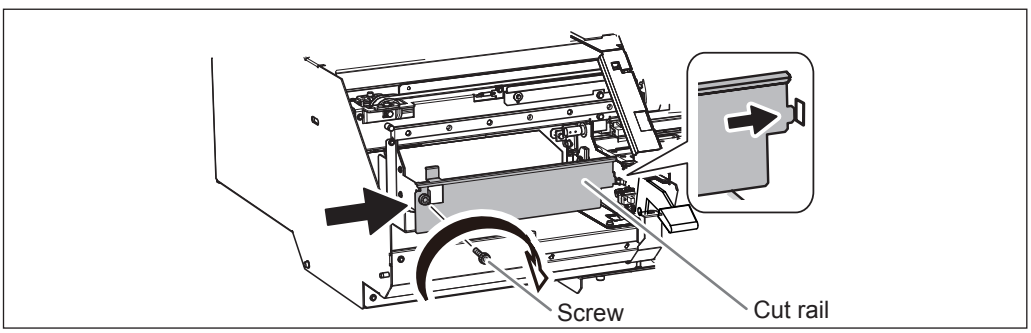
The print-head carriage moves to the right side of the machine, and then the screen on the left appears.

Remove the cover L.

❺ REPLACE CUT RAIL ↵

Attach the cut rail.

Press (ENTER).



❻ CLOSE COVER L

Attach the cover L.

CLEANING...
>>

The screen on the left appears and cleaning starts.

MAINTENANCE ◆◆
CLEANING ↵

When it finishes, the screen on the left appears again.

❼ **Press (FUNCTION) to go back to the original screen.**

4. Perform a printing test to verify the results of the procedure.

Perform a printing test to check the result.

Perform cleaning using the machine's cleaning feature several times when necessary.

☞ P. 40, "Printing Tests and Cleaning"

When Problems Such As Dot Drop-Out Are Not Cleared Up

When flaws in the dot pattern such as dot drop-out are not cleared up even after performing cleaning using the cleaning function (normal, medium, or powerful) or manual cleaning, perform the operation described below.

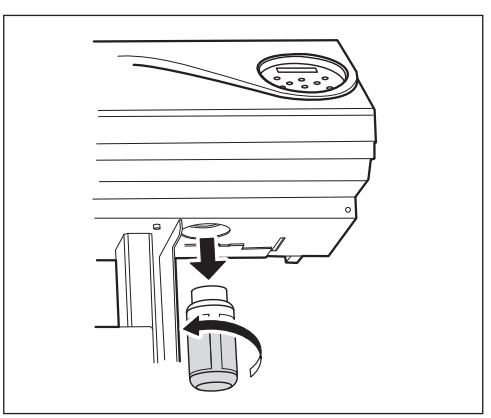
IMPORTANT!

A large amount of ink will be discharged during this operation. Moreover, ink of the non-selected color will be also discharged although the amount is less than the one of the selected color. Perform this operation only when dot drop-out cannot be cleared up even after performing cleaning using the cleaning function (normal, medium, or powerful) or manual cleaning.

☞ P. 51, "Maintenance that Should Be Performed Daily"
☞ P. 55, "When Normal Cleaning Is Not Effective"
☞ P. 58, "Maintenance that Should Be Performed More Than Once a Month"

Procedure

1. **Press MENU.**
2. MENU / SUB MENU ▸ — **Press ▼ several times until the screen on the left appears. Press ►.**
3. SUB MENU / INK CONTROL ▸ — **Press ▲ several times until the screen on the left appears. Press ►. (In the RF-640A, then press ▼.)**
4. INK CONTROL / SUPER CL. ▸ — **Press ►.**
5. SUPER CL. / M Y C K ↵ — **Press ◄ ► to select the color. Press ▼ ▲ to clear the color which the SUPER CLEANING will not be performed on.**
   Repeat this procedure to display the color that requires SUPER CLEANING.
6. **Press ENTER.**
7. EMPTY / DRAIN BOTTLE ↵ — **When the screen on the left appears, detach the drain bottle, discard the discharged fluid in it, and make it empty.**

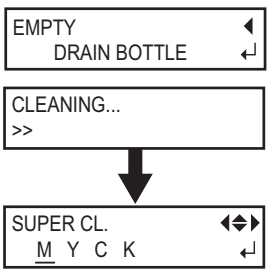


⚠CAUTION Be sure to discard the discharged fluid at this step.

A large amount of ink will be discharged during this operation. Be sure to discard the discharged fluid at this step. If you do not discard the discharged fluid at this step, the discharged fluid overflows from the drain bottle during the subsequent process.

⚠CAUTION **Before you detach the drain bottle, be sure to wait for the screen to display "EMPTY DRAIN BOTTLE."**
Failing to follow this procedure may cause discharged fluid to flow out of the machine and spill, soiling your hands or the floor.

❽



Attach the emptied drain bottle to the machine.
Press (ENTER).

The screen on the left appears.

When it finishes, the screen on the left appears again.

❾ **Press (MENU) to return to the original screen.**

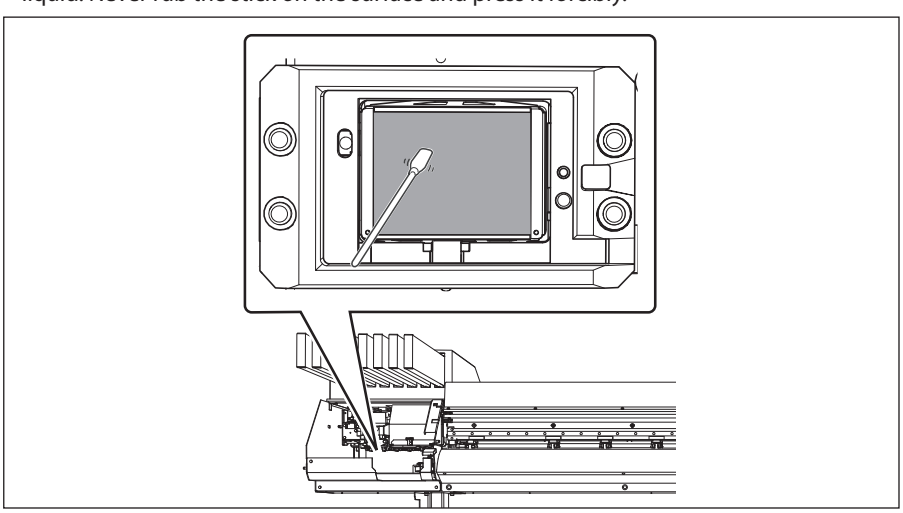
POINT! Cleaning of the print head surface as an emergency measure

When dot drop-out or dot deflection is not improved even if cleaning is performed several times, you can clean the print head surface as an emergency measure. Since the print head surface (nozzle surface) has an extremely delicate mechanism, make sure to perform the operation carefully and deliberately. Note that this operation is an emergency measure. It may damage defect-free parts depending on the symptom, deteriorating it. If you have any questions, contact your authorized Roland DG Corp. dealer or us.

Procedure

❶ **Moisten the cleaning stick with the cleaning liquid.**

❷ **Softly press the cleaning stick to the head surface (nozzle surface).**
Press it gently and softly so that the print head nozzle is permeated with the cleaning liquid. Never rub the stick on the surface and press it forcibly.



Replacing Consumable Parts

Replacing the Wiper

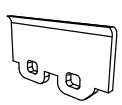
The wiper is the part used for cleaning of the print heads. When such the screen is displayed on the display screen, it is the time for replacement. Replace it with a new part.

TIME FOR WIPER REPLACE ↵

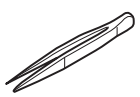
Regarding the purchase of the wiper, contact your authorized Roland DG Corp. dealer or us.

⚠CAUTION **Be sure to perform operations as specified by the following instructions, and never touch any area not specified in the instructions.**
Sudden movement of the machine may cause injury.

Necessary items



Wiper



Tweezers

1. Display the [REPLACE WIPER] menu.

❶ | TIME FOR
WIPER REPLACE ↵ | **When the screen on the left appears, press ENTER.**

❷ **Remove any media.**

❸ **Press MENU.**

❹ | MENU ◀▲▼
SUB MENU ▶ | **Press ▼ several times until the screen on the left appears. Press ►, and then ▲ twice.**

❺ | SUB MENU ◀▲▼
MAINTENANCE ▶ | **Press ►.**

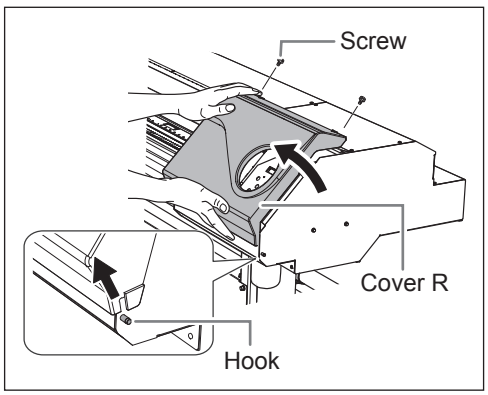
❻ | MAINTENANCE ◀▲▼
REPLACE WIPER ↵ | **Press ENTER.**

↓

OPEN COVER R

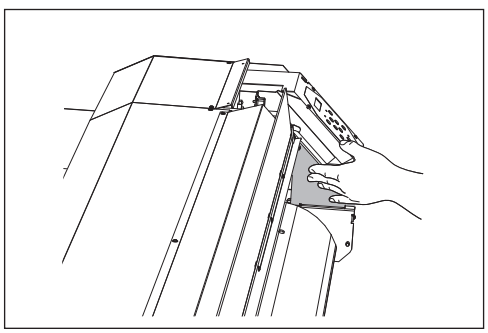
The print-head carriage moves to a location where wiper replacement is possible, and then the screen on the left appears.

❼



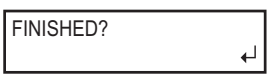
Remove the cover R.

❽



Touch the location shown in the figure to discharge any static electricity.

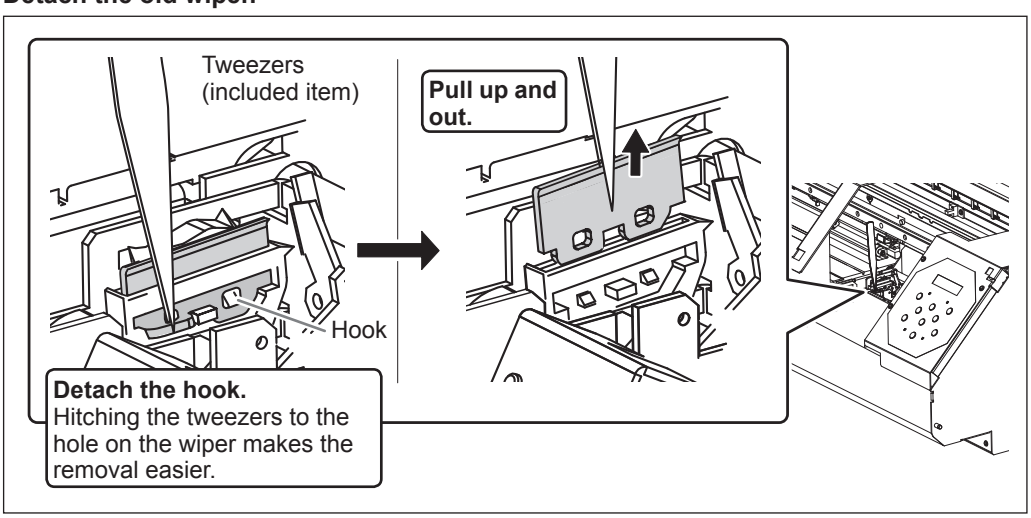
❾



Preparations are complete when this screen appears.

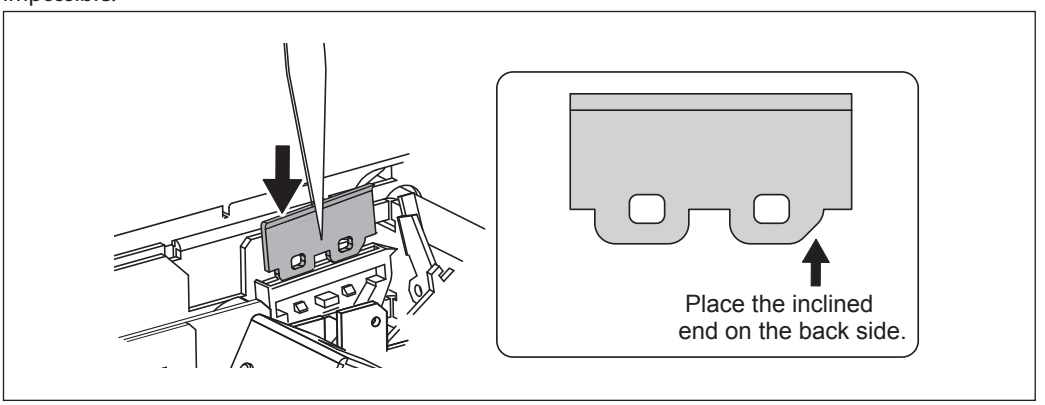
2. Replace the wiper.

❶ **Detach the old wiper.**

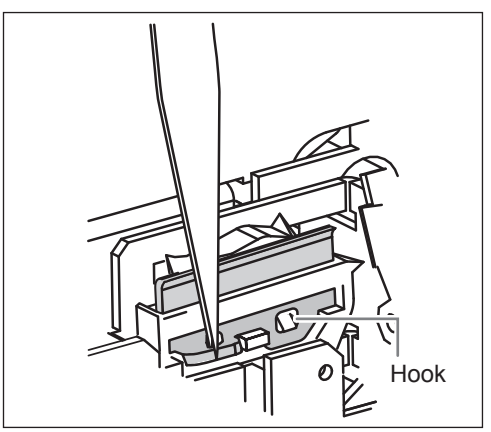


❷ **Attach the new wiper.**

Place the inclined end on the back side. If the wiper is placed inversely, the proper cleaning becomes impossible.



❸



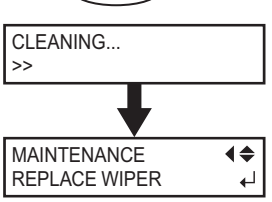
Attach the hook.

Make sure to attach the hook. Otherwise it causes dot-drop out or else.

3. Reattach the cover R, and finish the wiper replacement menu.

❶ **Attach the cover R.**

❷ **Press** (ENTER) **.**



After the process to finish the wiper replacement menu, the screen on the left appears.

❸ **Press** (MENU) **to go back to the original screen.**

4. Perform a printing test to verify the results of the procedure.

Perform a printing test to check the result.

☞ P. 40, "Printing Tests and Cleaning"

Replacing the Felt Wiper

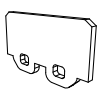
The felt wiper is the part used for cleaning of the print heads. When such the screen is displayed on the display screen, it is the time for replacement. Replace it with a new part.

TIME FOR FELT REPLACE ↵

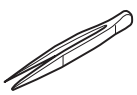
Regarding the purchase of the felt wiper, contact your authorized Roland DG Corp. dealer or us.

⚠CAUTION **Be sure to perform operations as specified by the following instructions, and never touch any area not specified in the instructions.**
Sudden movement of the machine may cause injury.

Necessary items



Felt wiper



Tweezers

1. Enter the felt wiper replacement menu.

❶ TIME FOR / FELT REPLACE ↵ — **When the screen on the left appears, press ENTER.**

❷ **Remove any media.**

❸ **Press MENU.**

❹ MENU ◆ / SUB MENU ▶ — **Press ▼ several times until the screen on the left appears. Press ►, and then ▲ twice.**

❺ SUB MENU ◆ / MAINTENANCE ▶ — **Press ►, and then ▼.**

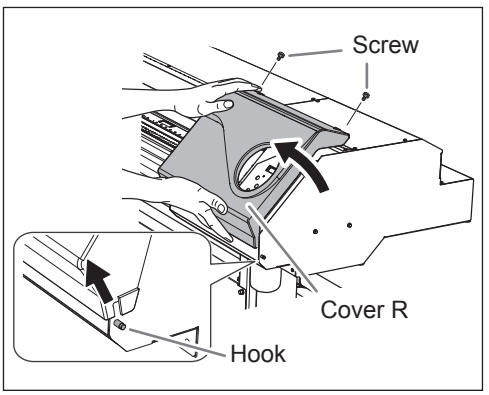
❻ MAINTENANCE ◆ / REPLACE FELT ↵ — **Press ENTER.**

↓

OPEN COVER R

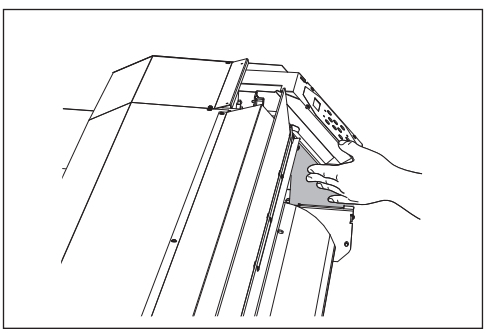
The print-head carriage moves to a location where felt wiper replacement is possible, and then the screen on the left appears.

❼



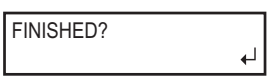
Remove the cover R.

❽



Touch the location shown in the figure to discharge any static electricity.

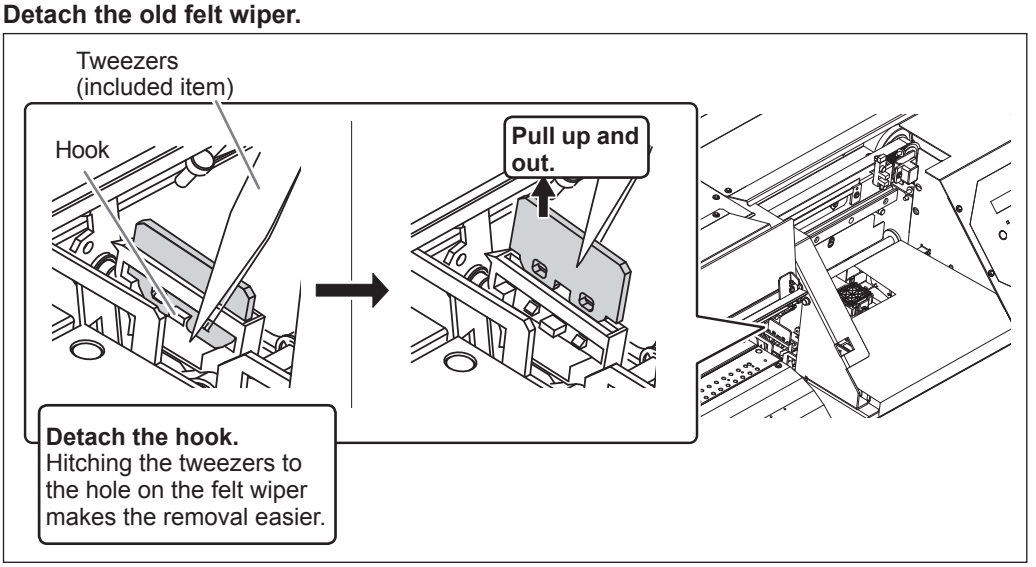
❾



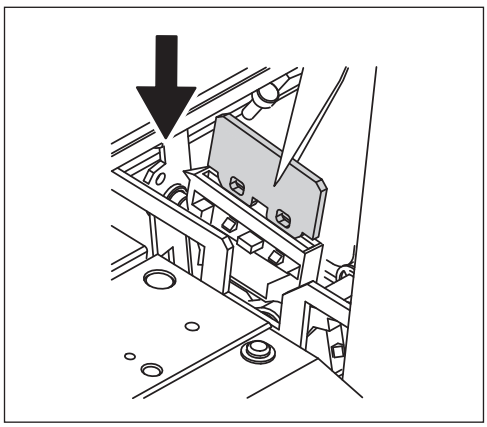
Preparations are complete when this screen appears.

2. Replace the felt wiper.

❶ **Detach the old felt wiper.**

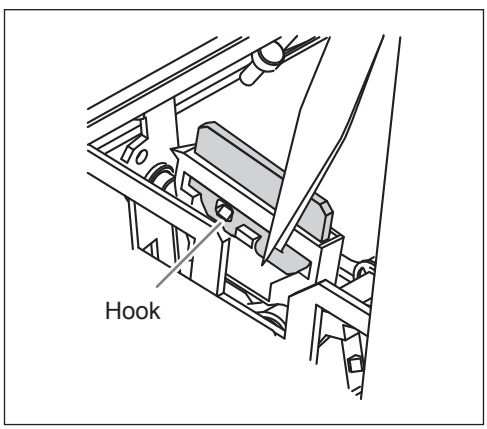


❷



Attach the new felt wiper.

❸

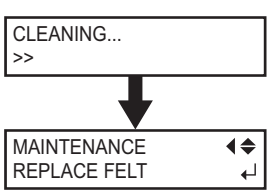


Attach the Hook.
Make sure to attach the hook. Otherwise it causes dot-drop out or else.

3. Reattach the cover R, and finish the felt wiper replacement menu.

❶ **Attach the cover R.**

❷ **Press** ENTER **.**



After the process to finish the felt wiper replacement menu, the screen on the left appears.

❸ **Press** MENU **to go back to the original screen.**

4. Perform a printing test to check the result.

Perform a printing test to check the result.

☞ P. 40, "Printing Tests and Cleaning"

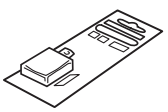
Replacing the Separating Knife

If the separating knife becomes dull, replace it with the included replacement knife.

⚠CAUTION **Be sure to perform operations as specified by the following instructions, and never touch any area not specified in the instructions.**
Sudden movement of the machine may cause injury.

⚠CAUTION **Never touch the tip of the separating knife.**
Doing so may result in injury.

Necessary items



Replacement blades for separating knife

1. Enter the separating knife replacement menu.

1. **Remove any media.**
2. **Press (MENU).**
3. MENU / SUB MENU ◆▲▼ ▶
   Press (▼) several times until the screen on the left appears.
   Press (►), and then (▲) twice.
4. SUB MENU / MAINTENANCE ◆▲▼ ▶
   Press (►).
5. MAINTENANCE ◆▲▼ ↵ / REPLACE KNIFE
   Press (▼) several times until the screen on the left appears.
   Press (ENTER).

   NOW PROCESSING..

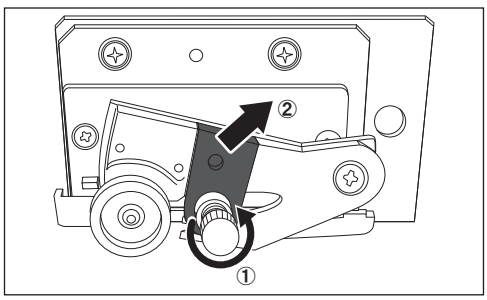
   ↓

   OPEN FRONT COVER

   The print-head carriage moves to a location where separating knife replacement is possible, and then the screen on the left appears.
6. FINISHED? ↵
   Open the front cover.
   Preparations are complete when this screen appears.

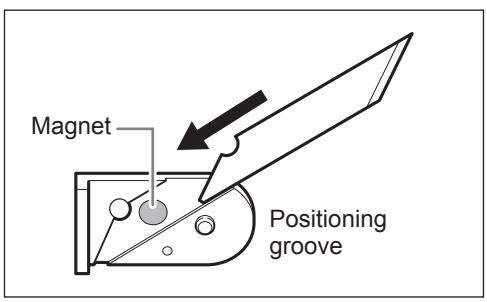
2. Replace the separating knife.

❶



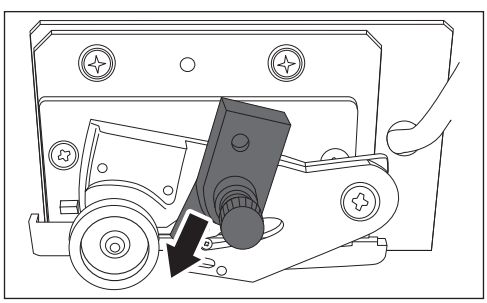
Remove the separating knife.
① Loosen the screw until it slips out.
② Grasp the screw portion, and slowly pull it out in the direction of the arrow. When doing this, do not pull it back toward you.

❷



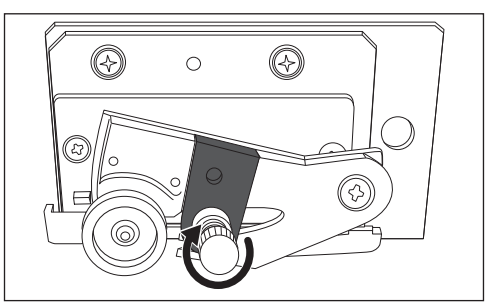
Install a new knife.
The knife is secured in place by the magnet.

❸



Slowly insert it into the groove.

❹



Tighten the screw.
Ensure that the knife does not slip out of position at this time.

3. Finish the separating knife replacement menu.

❶ **Close the front cover.**
Press ENTER.

❷ **Press MENU to go back to the original screen.**

When Not in Use for a Prolonged Period

Keep Performing Maintenance

Switch on the power once a month

Switch on the sub power once a month. When you switch on the power, the machine automatically performs some operations such as those to keep the print heads from drying out. Allowing the machine to stand completely unused for a prolonged period may damage the print heads, so be sure to switch on the power to perform these automatic operations.

Keep at a constant temperature and relative humidity

Even when the machine is not in use, keep it at a temperature of 5 to 40°C (41 to 104°F) and a relative humidity of 20 to 80% (with no condensation). Temperatures that are too high may degrade the ink and cause malfunction. Temperatures that are too low may cause the ink to freeze and damage the print heads.

Alarm Feature

This feature is to remind you to switch on the sub power once a month. When the machine remains unused for about one month, this screen appears and a warning beep sounds. If this screen appears, switch on the sub power. When maintenance operations finish, switch off the sub power.
This feature operates when the machine's main power is turned on. Be sure to always switch on the machine's main power even if the machine is not used for a prolonged period.

Chapter 4
Part of Practice

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Fully Utilizing Preset Function

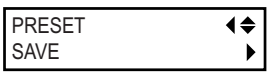
Saving Various Settings as a Name Assigned Preset

Procedure

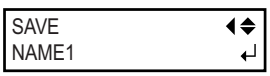
1. **Press MENU.**

2.

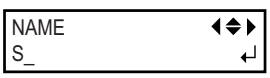
Press ▼ to display the screen on the left.
Press ►, and then ▼.

3. 

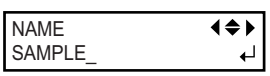
Press ►.

4. 

Press ▲ ▼ to select one of NAME1 through 8.
Press ENTER to enable the setting.
The present menu settings are saved.

5. 

Press ▲ ▼ to enter a character.
When a character is decided, press ►.
The characters you can enter are "A" through "Z," "0" through "9," and the "-" character. You can enter up to 15 characters, including spaces.

6. 

Press ▲ ▼ to enter a character.
Enter the following characters in the same way.
When entries are completed, press ENTER to enable the setting.

7. **Press MENU to go back to the original screen.**

Description

Using the [PRESET] menu lets you easily change a wide variety of settings to optimize them for the media. Up to eight types of presets can be saved. You can assign a name to each one. Using media names for these may aid recognition and clarity. Making changes for each menu item every time you change the media can be troublesome. That's why it can be useful to save the menu-item settings optimized for an often-used type of media as a preset. The next time you use the media, you can change the menu-item settings to the optimal values for the media simply by loading the preset you saved. Menu items that can be saved in presets are listed below.

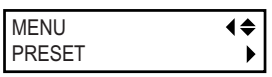
[PRINT] (Print heater), [DRYER]	☞ P. 79, "Making the Temperature Setting for the Media Heating System"
[PREHEATING]	☞ P. 81, "Control of Media Heating System During Preheating"
[DRYING TIME]	☞ P. 82, "Setting the Drying Time After Printing"
[FEED FOR DRY]	☞ P. 82, "Drying the Trailing Edge of the Printing Area on the Dryer"
[ADJUST BI-DIR SIMPLE SETTING]	☞ P. 84, "Correcting for Misalignment in Bidirectional Printing"
[ADJUST BI-DIR DETAIL SETTING]	☞ P. 85, "Correcting for Misalignment in Bidirectional Printing More Precisely"
[CALIBRATION]	☞ P. 85, "Alleviating Horizontal Bands and the Like (Feed Correction Function)"
[SHEET TYPE], [SHEET WIDTH], [SHEET POS.]	☞ P. 88, "Using Transparent Media"
[SCAN INTERVAL]	☞ P. 90, "Printing Hard-to-Dry Media"
[VACUUM POWER]	☞ P. 90, "Using the Media Easy to Curl Up / Hard to Be Fed"
[FULL WIDTH S]	☞ P. 91, "Speeding Up Printing for Narrow Media"
[SIDE MARGIN]	☞ P. 92, "Expanding the Printing Area by Reducing the Margins"
[MEDIA RELEASE]	☞ P. 94, "Using Sticky Media"

☞ P. 78, "Loading a Saved Preset"

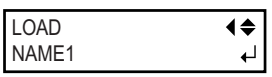
Loading a Saved Preset

Procedure

1. **Press MENU.**

2. 

   Press ▼ to display the screen on the left.
   Press ► twice.

3. 

   Press ▲ ▼ to select a name to be loaded.
   Press ENTER to enable the setting.

   The settings are changed and the screen on the left appears.

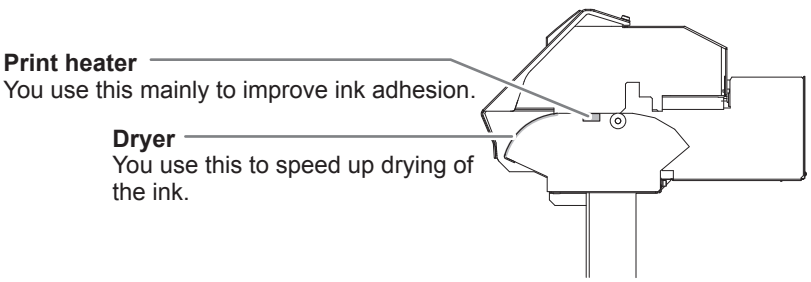
Description

This loads a saved preset. You can select any one of eight types of presets (When no names have been assigned, you select from among NAME1 through NAME8). If you load a preset while SETUP stays lighted, SETUP starts flashing. When the setup operation is completed, SETUP is lighted again.

Fully Utilize the Media Heating System

What Is the Media Heating System?

This machine is equipped with a media heating system that warms the media. You use this mainly to improve ink adhesion and also dry the ink. You can adjust the temperature settings to match the type of media and the print speed.



* By using an optional dryer, you can speed up drying of the ink more. Contact your authorized Roland DG Corp. dealer or us.

☞ P. 83, "Using an Optional Dryer"

⚠WARNING **CAUTION: high temperatures**
The platen and dryer become hot. Exercise caution to avoid fire or burns.

⚠WARNING **Remove any loaded media or switch off the sub power when printing is not being performed.**
The continued application of heat at a single location may cause fire or produce toxic gases.

⚠WARNING **Never use media that cannot withstand the heat.**
Doing so may result in fire or the release of toxic gases, or may degrade the media.

⚠WARNING **Never use the platen or dryer for any purpose for which they are not intended, such as to dry clothing.**
Doing so may cause overheating, resulting in fire or accident.

Use at an ambient temperature of 20 to 32°C (68 to 90°F).

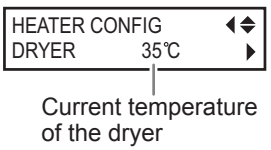
If the machine is used at an ambient temperature lower than 20°C (68°F), then depending on the type or width of the media, wrinkling or temperature-caused unevenness may occur. If this happens, try lowering the temperature of the media heating system by about 2°C. To obtain stable print results, however, the machine should be used at an ambient temperature of 20 to 32°C (68 to 90°F).

Making the Temperature Setting for the Media Heating System

Procedure

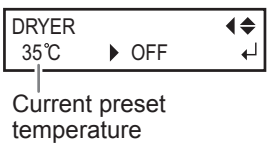
1. **Press** (FUNCTION).
2. FUNCTION / HEATER CONFIG — **Press** (▼) **several times until the screen on the left appears. Press** (►).

❸



Press ▲ ▼ to select [PRINT] (print heater) or [DRYER]
Press ►.

❹



Press ▲ ▼ to select a temperature.
You can set to "OFF." When set to "OFF," the media heating system does not operate at all.
Press ENTER to enable the setting.

> **POINT! PRINT HEATER: General Guide for Setting Temperature**
> You use this mainly to improve ink adhesion and inhibit smudging.
> If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.
>
> **POINT! DRYER: General Guide for Setting Temperature**
> When ink drying is poor, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

❺ **Press FUNCTION to go back to the original screen.**

Description

By default setting, simply switching on the power does not make the media heating system warm up to the preset temperature. The temperature rises until preset temperature when the media is loaded correctly and SETUP lights up. You can also make this setting on the software RIP. When you have made the setting on the software, the software's setting is used.

* Depending on the usage environment, the temperature of the print heater or dryer may become higher than the preset temperature, but this does not represent a problem.

> **POINT! Hints and Tips for Temperature Setting**
>
> **The relationship between the print mode and temperature**
> The optimal temperature for the media heating system varies according to such factors as the type of media and differences in the print mode. If smudging or poor drying occur even after raising the temperature, try using a print mode of RIP software offering higher image quality. Conversely, when you want to use a faster print mode, raise the temperature.
>
> **Amount of ink**
> When you change the amount of ink using the settings of your software RIP, adjusting this may yield better results. If problems such as smudging persist even after raising the temperature, try reducing the amount of ink.
>
> **Other points to remember**
> When recommended settings for temperature, print mode, and other values are given as the use condition of your media, use the suggested settings.

Default Setting

[PRINT]: 40 °C (104 °F)
[DRYER]: 45 °C (113 °F)

Control of Media Heating System During Preheating

*Preheating: State that the main power and the sub power are switched on and SETUP is not lighted (state that media loading is not completed)

Procedure

1. **Press MENU.**
2.

Press ▼ several times until the screen on the left appears. Press ►, and then ▼.
3.

Press ►.
4.

Press ▲ ▼ to select setting.
MENU
The machine performs heating to the preset temperature at all times, without lowering the temperature during preheating.
30 °C (86 °F)
The system keeps 30 °C (86 °F) during preheating.
OFF
The system switches the media heating system off during preheating.
Press ENTER to enable the setting.
5. **Press MENU to go back to the original screen.**

Default Setting

[PREHEATING]: 30 °C (86 °F)

Drying the Trailing Edge of the Printing Area on the Dryer

Procedure

1. **Press MENU.**
2.

Press ▼ several times until the screen on the left appears.
Press ► twice.
3.

Press ▲ ▼ to select "ENABLE."
Press ENTER to enable the setting.
4. **Press MENU to go back to the original screen.**

Description

- "ENABLE" : media feed is performed until the trailing edge of the printing area is positioned on the dryer. The margin between the print-end position and the next print-start position is set to a value of 100 millimeters when [OPTION DRYER] is "DISABLE" or 250 millimeters when "ENABLE."
  When you set the margin bigger than the value above on the software RIP, the software's setting is used.
  ☞ P. 83, "Using an Optional Dryer"
- "DISABLE" : media feed stops simultaneously when printing ends. This means that the trailing edge of the printing area is not fed to the dryer unless you continue with a subsequent printing operation.

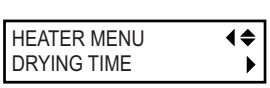
Default Setting

[FEED FOR DRY]: DISABLE

Setting the Drying Time After Printing

Procedure

1. **Press MENU.**
2.

Press ▼ several times until the screen on the left appears.
Press ►.
3. 

Press ▼ several times until the screen on the left appears.
Press ►.
4.

Press ▲ ▼ to select the interval.
Press ENTER to enable the setting.
5. **Press MENU to go back to the original screen.**

Description

Set the interval after the 1st page is printed. The next operation is not started until the set time passes. PAUSE is lighting during the interval. When pressing PAUSE while PAUSE is lighting, the interval is finished and the next operation is started. When holding on PAUSE while PAUSE is lighting, printing is canceled. You can also make this setting on the software RIP. When you have made the setting on the software, the software's setting is used.

Default Setting

[DRYING TIME]: 0 min

Using an Optional Dryer

Procedure

1. **Press MENU.**
2.

Press ▼ several times until the screen on the left appears.
Press ►, and then ▲ twice.
3.

Press ►.
4.

Use ▲ ▼ to select "ENABLE."
Press ENTER to enable the setting.
5. **Press MENU to go back to the original screen.**

Description

This switches the optional dryer "ENABLE" or "DISABLE".
When using an optional dryer, set [OPTION DRYER] to "ENABLE". You can speed up drying of the ink more. Contact your authorized Roland DG Corp. dealer or us for recommended dryer models. For the details of how to use an optional dryer, refer to the documentation for the dryer you're using.

Default Setting

[OPTION DRYER]: DISABLE

Correcting for Misalignment in Bidirectional Printing

Procedure

1. **Press** (MENU).

2. MENU / ADJUST BI-DIR ◀

   Press (▼) **several times until the screen on the left appears.**
   Press (►).

3. ADJUST BI-DIR / TEST PRINT ↵

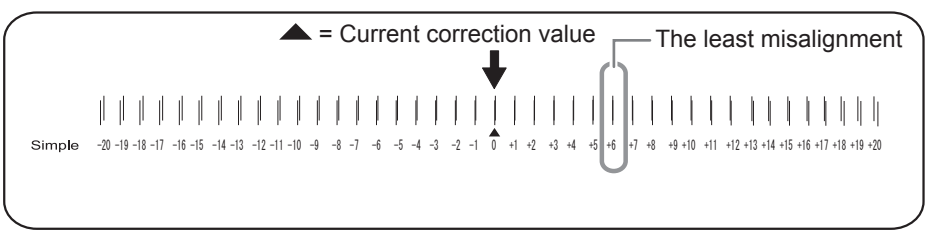
   Press (ENTER).
   A test pattern is printed.
   When printing is completed, press (▼) **and then,** (►).

4. SIMPLE SETTING / 0 ▶ +6 ↵

   Press (▲) (▼) **to select a correction value.**
   Press (ENTER) **to enable the setting.**

To decide a Correction Value

Choose the value that produces the least misalignment of 2 lines. When wavering between two numbers, select half value.



5. **Press** (MENU) **to go back to the original screen.**

Description

This machine prints by the bidirectional mode in which the print heads perform printing during both their outbound pass and return pass. This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten printing time, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction." This misalignment varies according to the head height and the thickness of the media, so we recommend performing correction to match the media you're using.

Correcting for Misalignment in Bidirectional Printing More Precisely

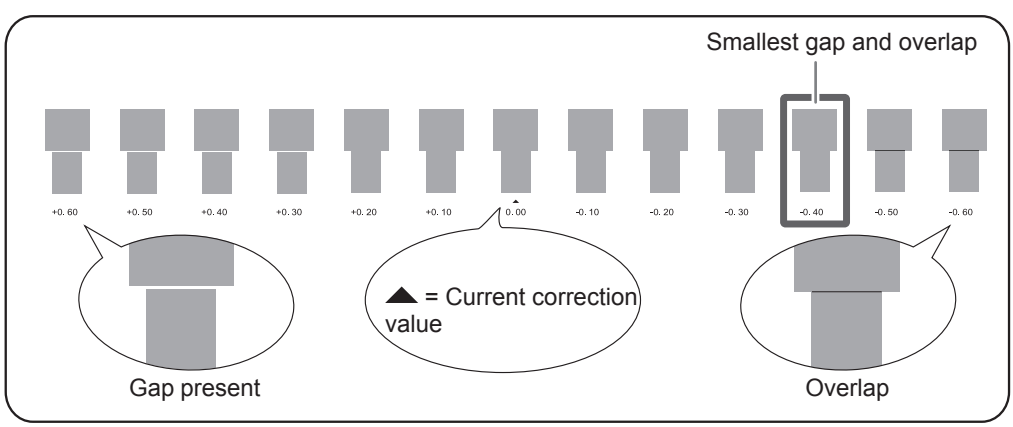
When further correction is required, such as when adjustment made using [SIMPLE SETTING] does not enhance printing, use [DETAIL SETTING] to make corrections.
For information on operations, refer to P. 31, "Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)".

Alleviating Horizontal Bands and the Like (Feed Correction Function)

Procedure

1. **When the roll media is used, check that no sagging is found on the media.**
2. **Press** MENU **.**
3. MENU / CALIBRATION ◀▲▼ ▶
   Press ▼ **several times until the screen on the left appears.**
   Press ► **.**
4. CALIBRATION / TEST PRINT ◀▲▼ ↵
   Press ENTER **.**
   A test pattern is printed.
   When printing is completed, press ▼ **, and then** ► **.**
5. SETTING / 0.00% ▶ -0.40% ◀▲▼ ↵
   Press ▲ ▼ **to select a correction value.**
   Press ENTER **to enable the setting.**

To decide a Correction Value
Select the value to make the upper/lower rectangular gap and overlap smallest. When wavering between two numbers, select half value.



6. **Press** MENU **to go back to the original screen.**

Description

The movement distance of media experiences subtle changes due to the thickness of the media and the temperature of the media heating system. When the movement distance becomes discrepant, horizontal stripes are more likely to occur during printing. We recommend performing correction to match the media you're using and the media heating system. Repeat the process of printing a test pattern and entering a correction value several times to find the optimal value.
You can also make this setting on the RIP software (by, for example,choosing the media type in the software RIP you are using). When you have made the setting on the software RIP, the software's setting is used and the machine's setting is ignored.

Adjusting Print Head Height to Match Media Thickness

Procedure

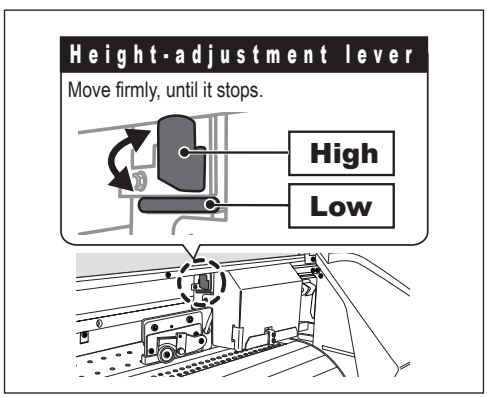
1. **Press MENU.**

2. MENU / HEAD HEIGHT ◀▲▼ ▶

   Press ▼ several times until the screen on the left appears.
   Press ► .

3. HEAD HEIGHT ◀ / LOW ▶ LOW ↵

   When the screen on the left appears, open the front cover.

4. 

   Move the height-adjustment lever to adjust the print head height.
   Moving the lever to "HIGH" makes a warning beep sound twice. Moving it to "LOW" makes the warning beep sound once.

5. MENU / HEAD HEIGHT ◀▲▼ ▶

   Close the front cover.
   The print-head carriage moves to the original position, and then the screen on the left appears.

6. **Press MENU to go back to the original screen.**

Description

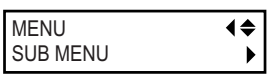
Depending on the media, media may wrinkle or come loose from the platen during printing, increasing the chance of contact with the print heads. When you are using such media, adjust the print head height to "HIGH." Print quality when the print head height is set to "HIGH" may be coarser or otherwise lower than when set to "LOW." If this happens, refer to the pages indicated below.

☞ P. 84, "Correcting for Misalignment in Bidirectional Printing"
☞ P. 31, "Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)"
☞ P. 93, "Preventing Soiling of the Media and Dot Drop-Out"

Using Transparent Media

1. Set the media type to "CLEAR."

❶ Press MENU.

❷


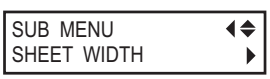
Press ▼ several times until the screen on the left appears.
Press ► twice.

❸

Press ▲ ▼ to select "CLEAR."
Press ENTER to enable the setting.

2. Make the setting for the media width.

❶ Press ◄, and then ▼.

❷


Press ►.

❸

Use ▲ ▼ to enter the media width.
Press ENTER to enable the setting.

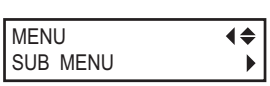
❹ Press MENU to go back to the original screen.

3. Load transparent media to the machine.

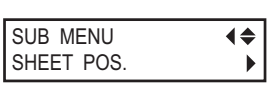
Refer to P. 21, "Loading Media" and load media on the machine.

4. Make the setting for the location of the right edge of the media.

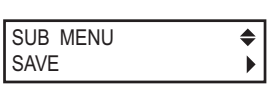
❶ Press MENU.

❷


Press ▼ several times until the screen on the left appears.
Press ►.

❸


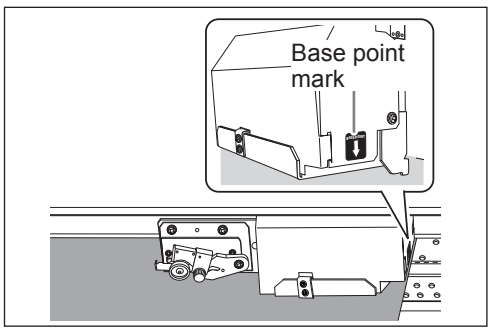
Press ▼ twice.
Press ►.



The print-head carriage moves to the position now set and the screen on the left appears.

4 **Open the front cover.**

5



Move the print-head carriage (base point mark) to the right edge of the media using ◄ ►.

The position indicated by the arrow of the base point mark is set as the location of the right edge of the media.

If a fixed period of time passes while the setting is in process, the menu is forcefully terminated.

If a fixed period of time passes while the setting is in process, the menu is forcefully terminated and the print-head carriage is returned to the standby position to prevent them from drying out. In that case, perform the step *4.* again.

To cancel ongoing setting for the location of right edge of media

1 **Close the front cover.**

2 SHEET POS ▲▼
CANCEL ↵

Press ▼ to display the screen on the left.

3 **Press ENTER.**

The print-head carriage returns to the standby position (inside the cover R).

6 **After positioning, close the front cover.**
Press ENTER to enable the setting.

Description

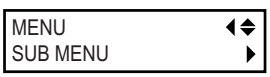
For transparent media, the width and position cannot be automatically detected. Therefore, [SHEET TYPE] must be set to "CLEAR" before the width and loaded position are set manually.
When [SHEET TYPE] is set to "CLEAR," printing does not stop if the media runs out while printing is in progress. If media runs out while printing is in progress, immediately press PAUSE to quit printing. Otherwise, there is a chance that the platen or the like may become soiled by ink or that ink may get inside and damage the machine.

Default Setting

[SHEET TYPE]: OPAQUE
[SHEET WIDTH]: 1625 mm

Printing Hard-to-Dry Media

Procedure

1. **Press MENU.**
2. 

Press ▼ several times until the screen on the left appears.
Press ►.
3.

Press ▼ several times until the screen on the left appears.
Press ►.
4.

Press ▲ ▼ to select a value.
Larger values produce progressively slower movement of the media, enabling you to extend the drying time accordingly.
Press ENTER to enable the setting.
5. **Press MENU to go back to the original screen.**

Description

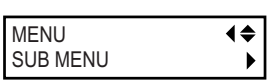
You use this when ink dries poorly even when the media heating system is used. You can also make this setting on the RIP software. When you have made the setting on the RIP software, the software's setting is used and the machine's setting is ignored.

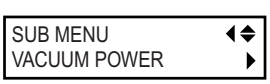
Default Setting

[SCAN INTERVAL]: OFF

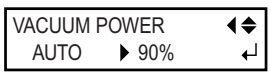
Using the Media Easy to Curl Up / Hard to Be Fed

Procedure

1. **Press MENU.**
2. 

Press ▼ several times until the screen on the left appears.
Press ►.
3. 

Press ▼ several times until the screen on the left appears.
Press ►.

❹ 

Press ▲ ▼ to select a value.

0 to 100%

A larger value produces a larger suction force. For the media easy to be loose due to warping or wrinkling, increase of the suction force may help correct the problem. When the media is flimsy and cannot move smoothly, reduction of the suction force may correct such the problem.

AUTO

The suction force is automatically adjusted to the optimal level for the media width.

Press ENTER to enable the setting.

❺ **Press MENU to go back to the original screen.**

Description

The platen uses suction to grip the media and keep it stable. The suction force can be adjusted corresponding to the nature and condition of the media.

You can also make this setting on the RIP software. When you have made the setting on the software, the software's setting is used and the machine's setting is ignored.

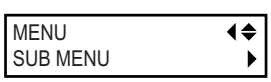
Default Setting

[VACUUM POWER]: AUTO

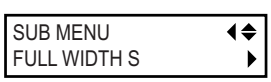
Speeding Up Printing for Narrow Media

Procedure

❶ **Press MENU.**

❷ 

Press ▼ several times until the screen on the left appears.
Press ►.

❸ 

Press ▼ several times until the screen on the left appears.
Press ►.

❹

Press ▲ ▼ to select a setting.

SHEET

"SHEET" matches the range of print-head carriage movement to the width of the media.

OFF

"OFF" matches the range of print-head carriage movement to the print data. Movement is limited to the minimum amount necessary, and this can be expected to yield the fastest printing. Note, however, that because the speed of media movement is no longer constant, colors may be uneven.

FULL
This makes the speed of media movement constant at all times and produces the most stable print result.
Press (ENTER) to enable the setting.

5 **Press (MENU) to go back to the original screen.**

Description

This shortens printing time by reducing the width of print-head carriage movement to the minimum necessary. This is effective when the width of the media or the print data is narrow.

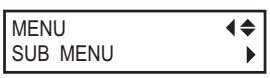
Default Setting

[FULL WIDTH S]: FULL (RF-640, RF-640A solvent-based ink type)
[FULL WIDTH S]: OFF (RF-640A water-based ink type)

Expanding the Printing Area by Reducing the Margins

Procedure

1 **Press (MENU).**

2 

Press (▼) several times until the screen on the left appears.
Press (►).

3

Press (▼) several times until the screen on the left appears.
Press (►).

4

Press (▲) (▼) to select [5mm].
Press (ENTER) to enable the setting.

5 **Press (MENU) to go back to the original screen.**

Description

This makes the setting for distance from the left or right media clamp to the corresponding left or right edge of the printing area. You can select either "5 mm", "10 mm," or "25 mm." Setting this to "5 mm" lets you expand the printing area.

☞ P. 124, "Maximum Printing Area and Margins""

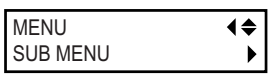
Note, however, that when you're using transparent media, setting this to "5 mm" may result in printing on the media clamps.

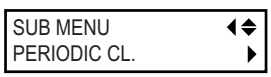
Default Setting

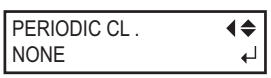
[SIDE MARGIN]: 10 mm

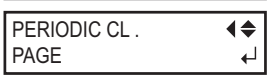
Preventing Soiling of the Media and Dot Drop-Out

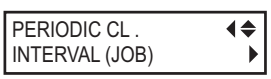
Procedure

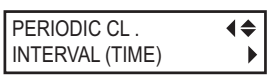
1. **Press MENU.**
2. 

Press ▼ several times until the screen on the left appears.
Press ►.
3. 

Press ▼ several times until the screen on the left appears.
Press ►.
4. 







Press ▲ ▼ to select a setting.

NONE

Automatic cleaning is not performed.

PAGE

Automatic cleaning is performed every time before printing starts.

INTERVAL (JOB)

Automatic cleaning is performed when the cumulative printing time reaches the value you set here. Colors may not be uneven by pausing printing because the automatic cleaning is not performed during printing but performed before the next print starts.

INTERVAL (TIME)

Automatic cleaning is performed when the cumulative printing time reaches the value you set here. Colors may be uneven because printing is paused if the cumulative printing time reaches the value you set during printing.

Press ENTER to enable the setting.

5. **Press MENU to go back to the original screen.**

Description

In the following cases, ink tends to collect on the surface of the print heads. Under some conditions, this ink may be transferred to the media or cause dot drop-out.

- When you use media prone to buildup of static charge.
- When the ambient temperature is low.
- When the head height is set to "HIGH."

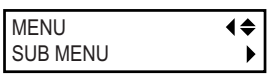
Selecting "PAGE" or "INTERVAL (JOB)", "INTERVAL (TIME)", the ink buildup is removed before or during printing. Note, however, that using these results in longer printing time.

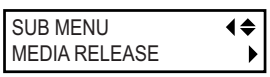
Default Setting

[PERIODIC CL.]: NONE

Using Sticky Media

Procedure

1. Press MENU.
2. 

Press ▼ several times until the screen on the left appears.
Press ►.
3. 

Press ▼ several times until the screen on the left appears.
Press ►.
4.

Press ▲ ▼ to select "ENABLE."
Press ENTER to enable the setting.
5. Press MENU to go back to the original screen.

Description

Some types of media may tend to stick to the platen. Starting printing with the media sticking to the platen may make normal media feed impossible and cause the media to jam. When you're using such media, set the [MEDIA RELEASE] menu item to "ENABLE." This peels off the media if sticking before starting printing. Note, however, that media feed may be unstable when printing is performed after executing this operation. Leave this menu item set to "DISABLE" unless you specifically need to change it.

Default Setting

[MEDIA RELEASE]: DISABLE

Printing with Crop Marks

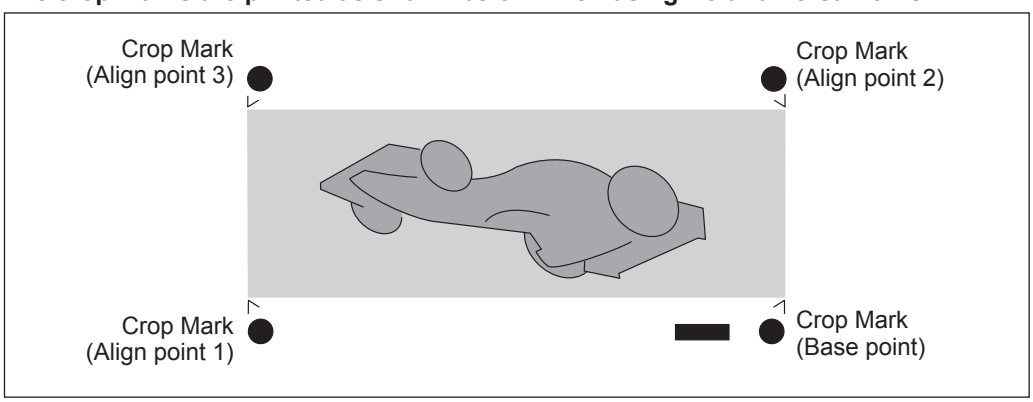
Printing with Crop Marks

Make the settings on your software RIP to print the crop marks. For information on how to make the setting, refer to the documentation for the software RIP you're using.

IMPORTANT!

Alignment marks and symbols drawn using a graphics program cannot be used as crop marks.

The crop marks are printed as shown below when using Roland VersaWorks.



Using Media Take-Up System

Use the Media Take-Up System

*The media take-up system (hereinafter called take-up system) is optional part.
*For information on how to assemble and install the take-up system, refer to the manual of the take-up system.

Chapter 5
To Administrators

Print Operation Management 98
- Printing a System Report 98
- Determining What Happens When Ink Runs Out (RF-640A only) 98
- Displaying the Amount of Media Remaining 99
- Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed 100
- Printing the Amount of Remaining Media 101

System Management of Machine 102
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- Viewing Information About the System of This Machine 103
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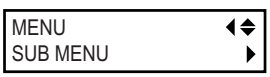
Print Operation Management

Printing a System Report

This prints system information, including a list of setting values.

Procedure

1. **Press (MENU).**
2. 

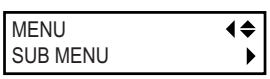
Press (▼) several times until the screen on the left appears.
Press (►).
3.

Press (▼) several times until the screen on the left appears.
Press (ENTER).
Start printing.
4. **Press (MENU) to go back to the original screen.**

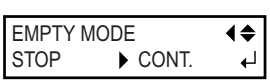
Determining What Happens When Ink Runs Out (RF-640A only)

This lets you change, according to your purpose, the operation that takes place when an ink cartridge becomes empty.

Procedure

1. **Press (MENU).**
2. 

Press (▼) several times until the screen on the left appears.
Press (►).
3.

Press (▲) several times until the screen on the left appears.
Press (►) twice.
4. 

Press (▲) (▼) to select a setting.
STOP: Printing pauses immediately when a cartridge becomes empty.
CONT (continue): Printing does not stop when a cartridge becomes empty. When a cartridge becomes empty, a warning beep sounds.
Press (ENTER) to enable the setting.
5. **Press (MENU) to go back to the original screen.**

Description

When "STOP" is selected, printing pauses and so colors may be uneven. Ensure a sufficient amount of remaining ink before you begin printing.
When "CONT" is selected, printing does not stop even if ink runs out completely. To replace the ink cartridge, wait until printing ends or press PAUSE to pause printing.

Default Setting

[EMPTY MODE]: STOP

Displaying the Amount of Media Remaining

You can display how much of the media in use is left. First, you set the amount of media remaining, the amount remaining is displayed at the top menu until it reaches zero.

Procedure

1. **Press MENU.**
2. MENU / SHEET REMAIN ◀▲▼▶
   Press ▲ to display the screen on the left.
   Press ▶, and then ▼.
3. SHEET REMAIN / SET LENGTH ◀▲▼▶
   Press ▶.
4. SET LENGTH / 0.0 m ▶ 25.0 m ↵
   Press ▲ ▼ to set the current amount of media remaining.
   Press ENTER to enable the setting.
5. W1200mm L 25.0m
   Press MENU to go back to the original screen.

This display is updated.

SETUP SHEET / L 25.0 m

If media loading has not been performed, the set value flashes.

Description

If you cancel the media loading such as by removing the media or raising the loading lever, the amount remaining at that time flashes on the screen.
Because the amount of media remaining is not updated automatically when you change the media, redo the setting whenever you change the media. You can also make the setting to display this menu automatically whenever you change the media. See the next section, P. 100, "Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed".
*The remaining amount that is displayed is only an estimate, and its accuracy is not assured.

Making Sure to Verify the Setting for the Amount Remaining Every Time the Media Is Changed

Set to display

```
SET LENGTH
0.0 m  ▶ 25.0 m  ↵
```

every time when a media is changed.

Procedure

1. **Press MENU.**
2. ```
   MENU
   SHEET REMAIN
   ```
   Press ▲ to display the screen on the left.
   Press ► .
3. ```
   SHEET REMAIN
   AUTO DISPLAY
   ```
   Press ▼ twice.
   Press ► .
4. ```
   AUTO DISPLAY
   DISABLE ▶ ENABLE ↵
   ```
   Press ▲ ▼ to select "ENABLE".
   Press ENTER to enable the setting.
   If you set to "ENABLE", you must set the [SHEET TYPE] menu to "OPAQUE."
   ☞ P. 88, "Using Transparent Media"
5. **Press MENU to go back to the original screen.**

Description

Setting this menu to "ENABLE" can keep you from forgetting to redo the setting when you change the media. Be sure, however, also to set the [SHEET TYPE] menu (refer to P. 88, "Using Transparent Media") to "OPAQUE." When [SHEET TYPE] is set to "CLEAR", [SHEET REMAIN] is not displayed automatically.

Default Setting

[AUTO DISPLAY]: DISABLE
   ```

Printing the Amount of Remaining Media

This prints the amount of media remaining that is displayed at the top menu.

Procedure

1. **Press (MENU).**
2. MENU / SHEET REMAIN
   Press (▲) to display the screen on the left.
   Press (►).
3. SHEET REMAIN / PRINT MEMO
   Press (ENTER).
   Start printing.
4. **Press (MENU) to go back to the original screen.**

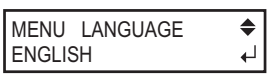
Description

You use this when you want to make a record of the remaining length of the media now in use. Printing the amount of media remaining before you change the media enables you to refer to the printed record and use the value to make the setting for the remaining amount the next time you use the media.
However, if you perform the next print continuously, it will be printed on the part where the amount of remaining media is printed. When continuing the next print, we recommend cutting off the media before you perform the next print operation.

Setting for the Menu Language and the Units of Measurement

This sets the language and units of measurement displayed on the display screen of the operation panel.

Procedure

1. **Hold down (MENU) and switch on the sub power.**
2. 

Use (▲) (▼) to select the display (menu) language.
Press (ENTER) to enable the setting.
3.

Use (▲) (▼) to select the measurement unit for length.
Press (ENTER) to enable the setting.
4.

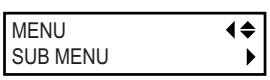
Use (▲) (▼) to select to the measurement unit for temperature.
Press (ENTER) to enable the setting.

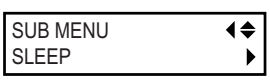
Default Setting

[MENU LANGUAGE]: ENGLISH
[LENGTH UNIT]: mm
[TEMP. UNIT]: °C

Setting the Interval Until Activation of the Sleep Mode (Power Saving Function)

Procedure

1. **Press (MENU).**
2. 

Press (▼) several times until the screen on the left appears.
Press (►).
3. 

Press (▲) several times until the screen on the left appears
Press (►) twice.
4.

Use (▲) (▼) to make the setting.
Press (ENTER) to enable the setting.
5. **Press (MENU) to go back to the original screen.**

Default Setting

[INTERVAL]: 30min

Viewing Information About the System of This Machine

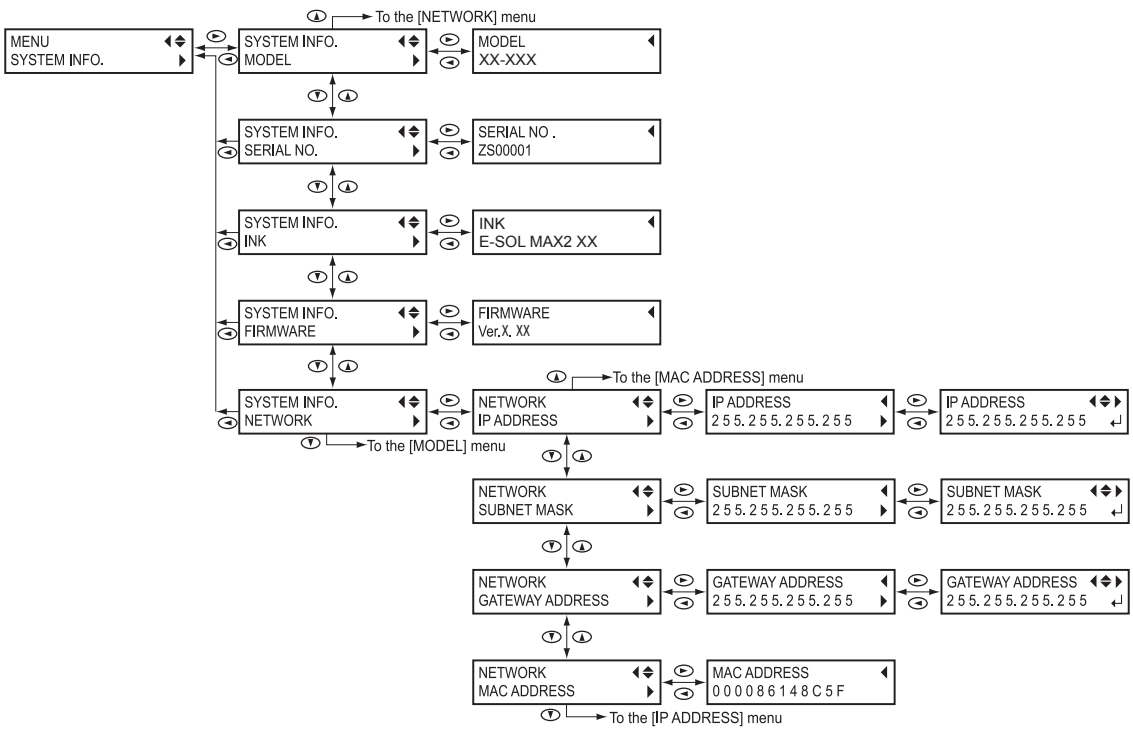
*For information on how to set up a network, refer to "Setup Guide."

Procedure

1. **Press MENU.**

2. MENU
   SYSTEM INFO.

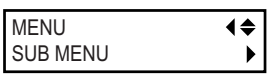
   Press ▲ several times until the screen on the left appears.
   You can view the following information.
   [MODEL]: Model name
   [SERIAL NO.]: Serial number
   [INK]: Ink type
   [FIRMWARE]: Firmware version
   [NETWORK]: Network configuration (IP address, etc)



Returning All Settings to Their Initial Values

This menu returns all settings to the same as their factory defaults. However, the settings for [MENU LANGUAGE], [LENGTH UNIT], and [TEMP. UNIT] are not returned to the factory defaults.

Procedure

1. **Press (MENU).**
2. 

Press (▼) several times until the screen on the left appears.
Press (►).
3.

Press (▼) several times until the screen on the left appears.
Press (ENTER) to execute.

Chapter 6
Read This Chapter Whenever You Face a Problem. (FAQ)

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Attractive Print Result Is Impossible

Print Results Are Coarse or Contain Horizontal Stripes

Do the print heads show dot drop-out?

Carry out a printing test and make sure no dot drop-out occurs. If dot drop-out is present, perform print heads cleaning.

☞ P. 40, "Printing Tests and Cleaning"
☞ P. 55, "When Normal Cleaning Is Not Effective"

Are the settings for the [PRESET] menu item appropriate?

If the settings selected with the [PRESET] menu item are not suitable for the type of media, the print result may be adversely affected. Choose settings optimized to the media you're using.

☞ P. 33, "Setup of Media"
☞ P. 76, "Fully Utilizing Preset Function"

Have you carried out bidirectional correction?

When you are performing bidirectional printing, use the [ADJUST BI-DIR] menu item to carry out correction. The optimal adjustment value may vary, depending mainly on the thickness of the media. Set or select an adjustment value that is suited to the media. When further correction is required, such as when adjustment made using [SIMPLE SETTING] does not enhance print result, use [DETAIL SETTING] to make correction.

☞ P. 84, "Correcting for Misalignment in Bidirectional Printing"
☞ P. 85, "Correcting for Misalignment in Bidirectional Printing More Precisely"

Have you carried out feed correction?

Large misalignment in the amount of feed of the media may result in print result that seems coarse or contains horizontal stripes. Either make the setting on the software RIP to match the type of media you're using, or make the setting for correction on the machine.

☞ P. 85, "Alleviating Horizontal Bands and the Like (Feed Correction Function)"

Is the head height appropriate?

Print result when the [HEAD HEIGHT] menu item is set to "HIGH" is coarser than when set to "LOW." Keep this set to "LOW" except when changing is necessary, such as when you're using thick media.

☞ P. 87, "Adjusting Print Head Height to Match Media Thickness"

Is the print heater at a suitable temperature?

If the ink forms lumps or smudges, raise the temperature. Note, however, that a temperature that is too high may degrade the media or cause it to wrinkle.

☞ P. 79, "Fully Utilize the Media Heating System"

Is the print mode suitable?

If attractive print result is impossible even when the media heating system is at a high temperature, try using a higher-quality print mode. Depending on the media, smudging may occur when using a high-quality print mode, and results may also vary greatly depending on the settings of your software RIP (such as the color-profile selection). Make settings suited to the media you're using.

Is the media loaded correctly?

If the media is not loaded correctly, media feed may not be smooth, or the print result may be adversely affected. Make sure the media is loaded and set up correctly.

☞ P. 21, "Loading Media"

Is the machine installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. Also make sure that the print heads are not exposed to moving air. These factors may lead to dot drop-out or reduced print quality.

Is the temperature of the room too low?

The media heating system may not warm up sufficiently when the ambient temperature is less than 20°C (68°F). Also, even when the media heating system reaches its preset temperatures, adequate effectiveness may not be apparent if the media is thoroughly chilled. Before printing, allow the media to come to room temperature.

Colors Are Unstable or Uneven

Are the settings for the [PRESET] menu item appropriate?

If the settings selected with the [PRESET] menu item are not suitable for the type of media, the print result may be adversely affected. Choose settings optimized to the media you're using.

☞ P. 76, "Fully Utilizing Preset Function"

Are the operating parameters set to appropriate values?

Depending on the settings for such menu items as [FULL WIDTH S] and [PERIODIC CL.], uneven colors may occur. If the settings have been changed, try restoring them to their default values.

☞ P. 91, "Speeding Up Printing for Narrow Media"
☞ P. 93, "Preventing Soiling of the Media and Dot Drop-Out"

Was printing paused partway through?

When printing is paused, the coloring at the seam may be altered when printing resumes. Avoid pausing printing. By default, printing pauses when ink remaining inside the machine runs out. Before you perform lengthy printing, check the amount of ink remaining in the ink cartridges. Printing may also pause when data is not sent from the computer quickly enough. We recommend not performing any other tasks with the computer while printing is in progress.

Is the media loaded correctly?

If the media is not loaded correctly, media feed may not be smooth, or the print result may be adversely affected. Make sure the media is loaded and set up correctly.

☞ P. 21, "Loading Media"

Did you shake the ink cartridges gently before installing them?

Shake new ink cartridges gently before you install them.

Is the media wrinkled?

If the media is wrinkled and comes loose from the platen, colors may be uneven or print result may be adversely affected.

☞ P. 110, "Media Wrinkles or Shrinks"

Is nothing printed for an extended period?

If nothing is printed for an extended period, color may be uneven and unstable, i.e. darkness or brightness is different though the same data is printed with the same settings. In that case, perform the light choke cleaning.

☞ P. 56, "When Uneven Color Issue Occurs"

Is the machine installed in a level and stable location?

Never install the machine in a location where it is tilted or where it may wobble or experience vibration. Also make sure that the print heads are not exposed to moving air. These factors may lead to dot drop-out or reduced print quality.

The Media Becomes Soiled When Printing

Are the print heads dirty?

The followings may cause ink to drip on the media during printing.

- **Buildup of fibrous dust (lint) around the print heads.**
- **Ink transferred to the print heads due to rubbing against the media.**

If this happens, clean the print heads manually. We recommend carrying out the periodic cleaning of the print heads.

☞ P. 58, "Maintenance that Should Be Performed More Than Once a Month"

- **Too Low Humidity.**

Use this machine in the environment of 35 to 80 % RH (non condensation).

Are the pinch rollers or the media clamps dirty?

Periodically clean them.

☞ P. 53, "Cleaning"

Do the print heads contact the media?

The height of the print heads may be too low. Also, if the media is not loaded correctly, it may wrinkle or come loose and strike the print heads.

☞ P. 87, "Adjusting Print Head Height to Match Media Thickness"
☞ P. 110, "Media Feed Is Not Smooth"

Media Jam Occurs!

The Media Jams

If an error message is displayed because the media has jammed, immediately correct the problem. Failure to do so may damage the print heads.

☞ P. 121, "[MOTOR ERROR TURN POWER OFF]"

Are the grid rollers dirty?

Make sure the grid rollers are free of buildup of foreign material such as media scraps.

☞ P. 53, "Cleaning"

Is the height of the print heads too low?

Try raising the print heads higher. Media may inevitably warp or wrinkle slightly, so adjust the height of the print heads to take this into account.

☞ P. 87, "Adjusting Print Head Height to Match Media Thickness"

Are the media clamps mounted?

When you're performing printing, be sure to attach the media clamps.

Is the media loaded straight and securely?

Feed is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

☞ P. 21, "Loading Media"

Does the media strike some other objects?

Make sure the media does not touch anything else.

☞ P. 21, "Loading Media"

Is the media too thick?

Media that is too thick may not only cause unstable feed, but may scrape the print heads, resulting in malfunction. Never use such media.

Is the media warped or wrinkled?

Many factors can cause warping or wrinkling. Refer to the following and correct the problem.

☞ P. 110, "Media Wrinkles or Shrinks"

Media Feed Is Not Smooth

A variety of problems can occur if the media feed is not smooth. This can cause such problems as poor print quality, contact with the media by the print heads, misaligned positioning, or media jams. Take action as follows.

Media Wrinkles or Shrinks

Is the temperature of the media heating system too high?

Set the temperature to suitable values for the type of media.

☞ P. 79, "Fully Utilize the Media Heating System"

Are the media clamps mounted?

When you're performing printing, be sure to attach the media clamps.

Was the media loaded while the print heater was hot?

Loading media after the print heater has warmed up causes the temperature of the media to rise suddenly, which may cause the media to shrink or wrinkle during printing. Before loading media, switch off the sub power and allow the platen to cool.

☞ P. 79, "Fully Utilize the Media Heating System"

Was loaded media allowed to stand for some time?

Media may shrink or wrinkle if it is heated for an extended time. When printing ends, switch off the sub power or remove the media.

Is the media loaded straight and securely?

Feed is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

☞ P. 21, "Loading Media"

Is the using media deflected?

If using the deflected media, it cause wrinkle of the media.

Is the temperature of room too low?

Use this machine in an environment having an ambient temperature of 20 to 32°C (68 to 90°F). If the machine is used at an ambient temperature less than 20°C, then depending on the type or width of the media, wrinkling or temperature-caused unevenness may occur. If this happens, try lowering the temperature of the media heating system by about 2°C. To obtain stable print results, however, the machine should be used at an ambient temperature of 20 to 32°C(68 to 90°F).

Is the humidity of the room too high?

Use this machine in the environment of 35 to 80 %RH (non condensation).

Media Feed Is Not Straight

Are the grid rollers dirty?

Check to make sure the grid rollers are free of buildup of foreign material such as media scraps.

☞ P. 53, "Cleaning"

Is the media loaded straight and securely?

Feed is not smooth when the media is not straight or is tensioned unevenly on the left and right. Reload the media.

☞ P. 21, "Loading Media"

Does the media strike some other objects?

Make sure the media does not touch anything else.

☞ P. 21, "Loading Media"

Is the media too thick?

Media that is too thick may not only cause unstable feed, but may scrape the print heads, resulting in malfunction. Never use such media.

Media Feed Is Not Smooth

Are the grid rollers dirty?

Check to make sure the grid rollers are free of buildup of foreign material such as media scraps.

☞ P. 53, "Cleaning"

Does the media strike some other objects?

Make sure the media does not touch anything else.

☞ P. 21, "Loading Media"

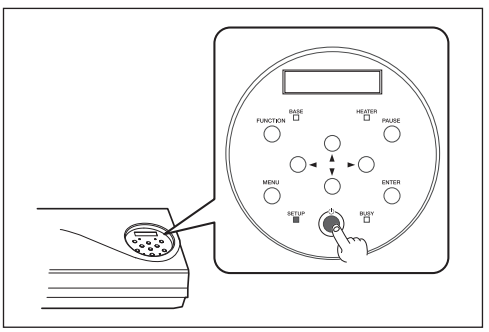
Is the media too thick?

Media that is too thick may not only cause unstable feed, but may scrape the print heads, resulting in malfunction. Never use such media.

Print-head Carriage Stops Moving. Why?

If the print-head carriage stops over the platen, take action immediately to prevent the print heads from drying out.

What to Do First



Switch the sub power off, then back on again.
If the media is jammed, then also remove the media.
If the print-head carriage moves to the standby position (inside the cover R), it means the operation has ended successfully.

If the Print-head Carriage Still Does Not Move

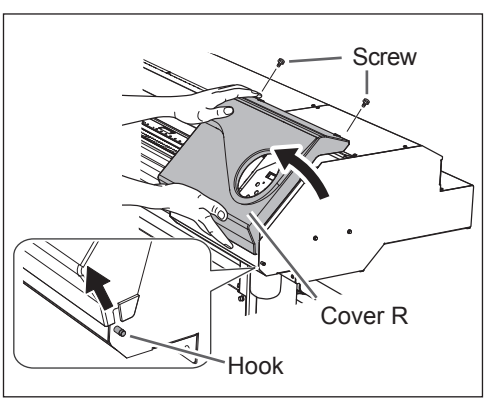
Try switching off the main power, then again switching on the main power, followed by the sub power.

If the Print-head Carriage Still Does Not Move

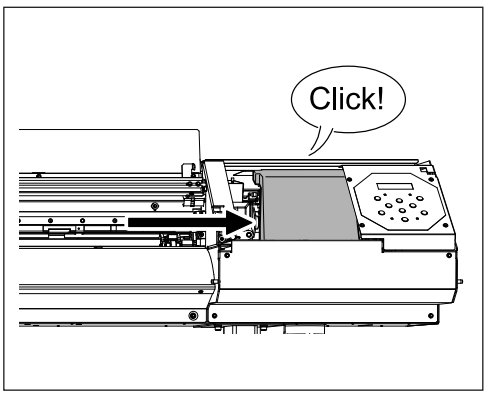
If the print-head carriage still does not move, carry out the following emergency response measure, then contact your authorized Roland DG Corp. dealer or us.

Procedure

1. **Switch off the main power and open the front cover.**
2. **Remove the Cover R.**



❸



Gently move the print-head carriage to the standby position.

Stopping at the place where the audible click is heard locks the print-head carriage in place.

❹ **Gently apply pressure from the right side to make sure the print-head carriage does not move to the left.**

If the print-head carriage moves to the left, again move it slowly by applying pressure from the left side and make sure it locks in place.

Other Problems

The Machine Doesn't Run

Is the cable connected?

Connect the cable securely.

☞ "Setup Guide"

Is the power switched on?

Switch on the main power, then press the sub power switch and make sure the sub power switch lights up.

☞ P. 20, "Switch On!"

Are the covers open?

Close Front Cover, Cover L and Cover R.

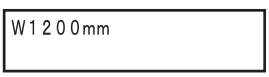
Is [SETUP] lit up?

Printing is not performed when [SETUP] is not lit. Lower the loading lever.

☞ P. 42, "Getting Ready to Receive Data from a Computer"

Is the top menu displayed?

Top menu



If the top menu isn't displayed, printing doesn't start even when data is sent from the computer. To go to the top menu, press (MENU), then press (◄).

☞ P. 42, "Getting Ready to Receive Data from a Computer"

Is a message displayed on the screen?

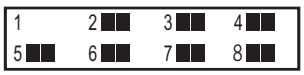
☞ P. 117, "A Message Appears"
☞ P. 119, "An Error Message Appears"

Is (PAUSE) lit up?

When (PAUSE) lights up, operation is paused. To resume, press (PAUSE). (PAUSE) goes dark and printing resumes.

☞ P. 44, "Pausing and Canceling Printing"

Has ink run out?



When the screen is displayed, the machine cannot receive the data. If the screen appears during printing, the machine operation differs according to the setting of "EMPTY MODE". (only RF-640A)

- When "STOP" is selected: The printing temporarily stops.
- When "CONT." is selected: A warning beep sounds and the printing continues until the machine finishes printing the received data. You can temporarily stop the printing operation by pressing (PAUSE).

In either case, replacing the ink cartridge with a new one allows the machine to recover from the error.
If the machine holds the print data that have not been processed, the printing operation is resumed.
If there are unsent data in the computer, resending the data allows printing to be restarted.

☞ P. 49, "How to Replace Ink Cartridges"
☞ P. 98, "Determining What Happens When Ink Runs Out (RF-640A only)"

Is the network routing appropriate?

Try connecting the computer and the machine to the same hub, or connecting them directly using a crossover cable. If this makes it possible to perform printing, it means the problem is in the network itself.

Are the network settings correct?

If the cable connections are secure and no problem is found in the network itself, make sure that the IP address and other such settings are appropriate. The settings on both the machine and the computer must be appropriate. Ensure that the IP address doesn't conflict with the IP address for another device on the network, that the port setting for the software RIP specifies the IP address set on the machine, that the settings have no typing errors, and for other such problems.

☞ "Setup Guide"
☞ P. 103, "Viewing Information About the System of This Machine"

Did the software RIP end abnormally?

Make sure the software RIP is running correctly, then switch the sub power off and back on.

☞ "Roland VersaWorks Quick Start Guide" (RF-640A does not include this)

The Media Heating System Doesn't Warm Up

Are the settings for the [HEATER CONFIG] menu item appropriate?

Check the heater temperature in [HEATER CONFIG].

☞ P. 79, "Fully Utilize the Media Heating System"

Is media loaded?

The media heating system does not warm up to the preset temperature when SETUP is dark (by default). Load media and wait for the machine to warm up.

☞ P. 79, "Fully Utilize the Media Heating System"

Is the temperature of the room too low?

Use the machine in an environment where the temperature is 20 to 32°C (68 to 90°F).

Cannot Cut Off the Media

Is the separating knife mounted?

If the separating knife is not mounted, you cannot cut off the media.

☞ P. 72, "Replacing the Separating Knife"

Is the cut rail mounted?

If the cut rail is not mounted, you cannot cut off the media.

☞ P. 72, "Replacing the Separating Knife"

Discharged Fluid Level Cannot Be Checked.

Are there ink splashes inside the drain bottle?

If the inner surface of the drain bottle has ink splashes, you may not be able to check the amount of discharged fluid.

☞ P. 52, "When You Cannot Check Discharged Fluid Level in Drain Bottle"

A Message Appears

These are the main messages that appear on the machine's display screen to prompt correct operation. They do not indicate any error. Follow the prompts and take action accordingly.

[1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■] (RF-640) [1 ■ 2 ■ 3 ■ 4 ■] (RF-640A)

The machine ran out of the ink. Replace the ink cartridge indicated by the flashing number with a new ink cartridge.

[PRESS THE POWER KEY TO CLEAN]

This appears when the machine has been unused for about one month. Switch on the sub power once a month.

☞ P. 74, "When Not in Use for a Prolonged Period"

[CLOSE THE COVER (FRONT COVER, COVER L or COVER R]

Close the Front cover, Cover L, or Cover R. For safety, the print-head carriage does not operate while a cover is open.

[SHEET NOT LOADED SETUP SHEET]

Load media. This message appears when an attempt to perform a printing test was made while no media was loaded.

[EMPTY DRAIN BOTTLE]

This appears when a certain amount of discharged fluid collects in the drain bottle. If this screen appears, discard the discharged fluid in the drain bottle.

☞ P. 51, "Discard Discharged Fluid"

[INSTALL DRAIN BOTTLE]

Check whether the drain bottle is installed. Install the drain bottle, then press ENTER.

☞ P. 51, "Discard Discharged Fluid"

[NOW HEATING...]

Wait until the media heating system reaches the preset temperature. Printing starts when HEATER lights up. You can stop printing by holding down PAUSE for one second or longer while this is displayed. Pressing PAUSE makes printing start immediately, without waiting to reach the preset temperature.

[TIME FOR MAINTENANCE]

It is time to clean the print heads manually. After verifying, press ENTER.

☞ P. 59, "Manual Cleaning"

[TIME FOR WIPER (FELT) REPLACE]

It is time to replace the wiper or felt wiper. After verifying, press ENTER.

☞ P. 66, "Replacing the Wiper"
☞ P. 69, "Replacing the Felt Wiper"

[END OF THE SHEET]

The trailing edge of the media was detected during operation. Press any button on the operation panel to clear the message. Load new media.

[REMOVE MEDIA CLAMPS]

This appears if the media clamps are attached when cutting off the media. Open the front cover, remove the right and left media clamps, and then press ENTER.

An Error Message Appears

This describes the error messages that may appear on the machine's display screen, and how to take action to remedy the problem. If the action described here does not correct the problem, or if an error message not described here appears, contact your authorized Roland DG Corp. dealer or us.

[HEATING TIMEOUT CONTINUE?]

The print heater or dryer did not reach the preset temperature.

This occurs because the temperature of the location where the machine is installed is too low. We recommend raising the temperature. To continue waiting for the temperature to rise, press (ENTER). To start printing immediately, press (PAUSE).

[CAN'T PRINT CROP CONTINUE?]

The size of the data including the crop marks is larger than the printing area of the loaded media.

To continue performing printing without correcting this, press (ENTER). At this time, the portion extending beyond the printing area and the crop marks are not printed. To stop printing, stop sending data from the computer, then raise the loading lever. Make the printing area wider, such as by replacing the media with a larger piece of media then send the data again.

The size of the data being printed is too small.

Make the scanning-direction size of the data at least 65 mm (2.6 in). To continue printing without correcting this, press (ENTER). At this time, the data is printed without the crop marks. To stop printing, stop sending data from the computer, then raise the loading lever. Change the size of the data, then send the data again.

[TEMPERATURE IS TOO HIGH **°C]

The temperature of the location where the machine is installed has risen above the ambient temperature at which the machine can operate.

Operation cannot be continued. Switch off the sub power. The displayed temperature is the current ambient temperature of the installation location. Bring the installed location to a temperature at which operation is possible (15 to 32°C (59 to 90°F)) and allow the machine to come to room temperature, then switch on the power.

[TEMPERATURE IS TOO LOW **°C]

The temperature of the location where the machine is installed has fallen below the ambient temperature at which the machine can operate.

Operation cannot be continued. Switch off the sub power. The displayed temperature is the current ambient temperature of the installation location. Bring the installed location to a temperature at which operation is possible (15 to 32°C (59 to 90°F)) and allow the machine to come to room temperature, then switch on the power.

[SERVICE CALL ****]

An unrecoverable error occurred, or part replacement that must be performed by a service technician is required.

Note the number displayed, then switch off the sub power. After you switch off the power, inform your authorized Roland DG Corp. dealer or us of the number that appeared on the display screen.

[SHEET TOO SMALL CONTINUE?]

The size of the data is larger than the printing area of the loaded media.

To continue printing without correcting this, press ENTER. At this time, the portion extending beyond the printing area is not printed. To stop printing, stop sending data from the computer, then raise the loading lever. Make the printing area wider, such as by replacing the media with a larger piece of media then send the data again.

[SHEET SET ERROR SET AGAIN]

The loading lever was lowered while no media was loaded.

Raise the loading lever, place media at the correct location, then lower the lever again.

☞ P. 21, "Loading Media"

[SHEET TYPE] is set to "OPAQUE," but transparent media was loaded.

Raise the loading lever, set the [SHEET TYPE] menu item to "CLEAR" then reload the media.

☞ P. 88, "Using Transparent Media"

The loaded media is too small.

Press any key to clear the error. Replace with media of usable size.

[DATA ERROR CANCELING...]

Printing was stopped because a problem was found in the data received.

Operation cannot be continued. Check for a problem with the connector cable or the computer, and redo the operation from the step of loading the media.

[WRONG CARTRIDGE]

An ink cartridge that cannot be used was installed.

Remove the ink cartridge to clear the error. Use the ink cartridge of the specified type.

[CLEANING ERROR]

The machine made an emergency stop because an ink cartridge was removed while light choke cleaning or ink filling for the first time in the machine was in progress.

Operation cannot be continued. Switch the sub power off and then back on. Perform [SUPER CLEANING] in all the colors and then, perform [LIGHT CHOKE CLEANING].

☞ P. 64, "When Problems Such As Dot Drop-Out Are Not Cleared Up"

[CANCELED FOR PUMP PROTECTION]

The machine made an emergency stop because the following state has continued for 10 minutes or longer while cleaning (normal, medium, powerful, super, light choke, automatic cleaning when the sub power is off) or while ink filling for the first time in the machine was in progress.

- Machine is left with an ink cartridge removed
- Machine runs out of ink

Operation cannot be continued. Switch off the sub power. Then, contact your authorized Roland DG Corp. dealer or us.

[AVOIDING DRY-UP TURN POWER OFF]

The print-head carriage was forced to move to the standby position to prevent the print heads from drying out.

Operation cannot be continued. Switch the sub power off, then back on.

[SET HEAD HEIGHT TO . . .]

The height of the print heads is lower than the height specified on the software RIP.

This warning indicates that the height of the print heads is too low for the media thickness specified on the software RIP. The print-head carriage moves to a location where you can operate the height-adjustment lever. Adjust to the displayed height, then press ENTER.

☞ P. 87, "Adjusting Print Head Height to Match Media Thickness"

[MOTOR ERROR TURN POWER OFF]

A motor error occurred.

Operation cannot be continued. Switch off the sub power. Next, eliminate the cause of the error, then immediately switch on the sub power. If the machine is allowed to stand with the error uncorrected, the print heads may dry out and become damaged.

This error may be caused by such factors as a mistake in loading the media, a media jam, or an operation that pulls the media with excessive force.

The media has jammed.

Carefully remove the jammed media. The print heads may also be damaged. Perform the cleaning of the print heads, then perform a printing test and check the results.

The media was pulled with excessive force.

Excessive tension was applied to the media, and additional action is necessary to recover from this state. First, raise the loading lever and adjust the media to create a small amount of slack, then switch on the sub power.

[PINCHROLL ERROR LOWER PINCHROLL]

The loading lever was raised during the initialization or after the media has been loaded.

The error is cleared automatically after a short wait. Load the media correctly again.

[WRONG HEAD IS INSTALLED]

A print head that cannot be used was installed.

Operation cannot be continued. Switch off the sub power and contact your authorized Roland DG Corp. dealer or us.

Chapter 7
Main Specifications

Printing Area 124
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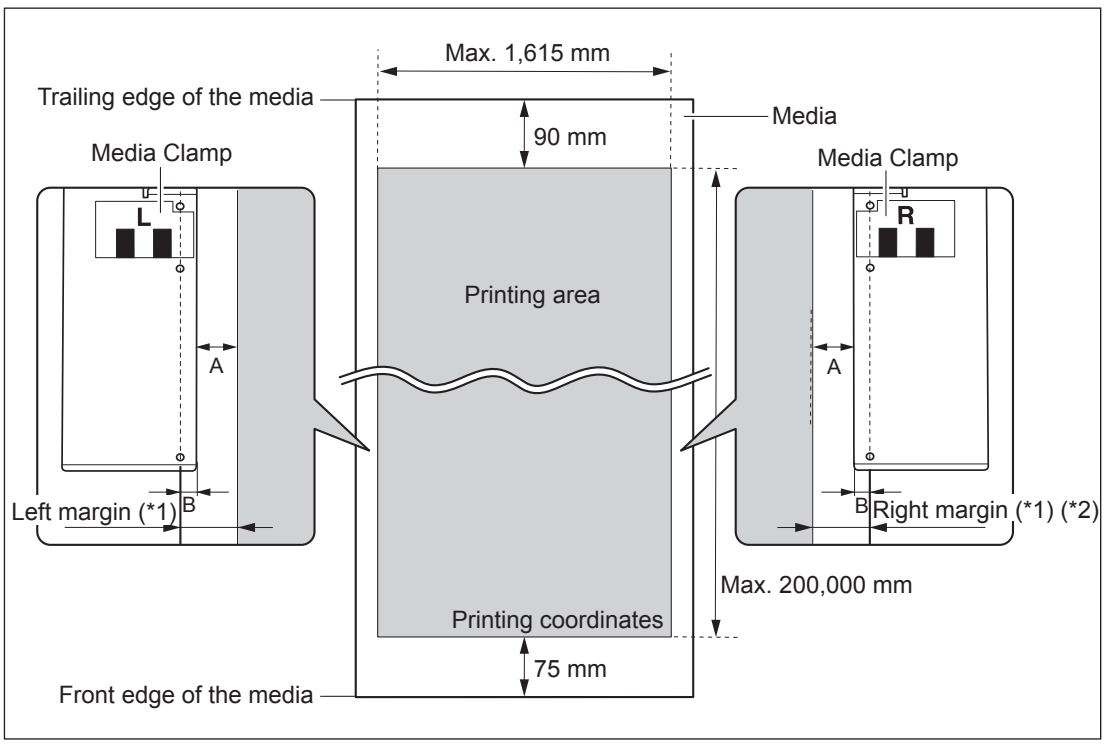
Specifications 127

Printing Area

Maximum Printing Area and Margins



A: Setting of the [SIDE MARGIN] menu item (5 mm, 10 mm (default setting), or 25 mm)
B: Width clamped by the media clamp (approx. 5 mm)

*1 The amount of the left and right margins is the total of A and B. In the following cases, however, the setting for A becomes the amount of margin without change.

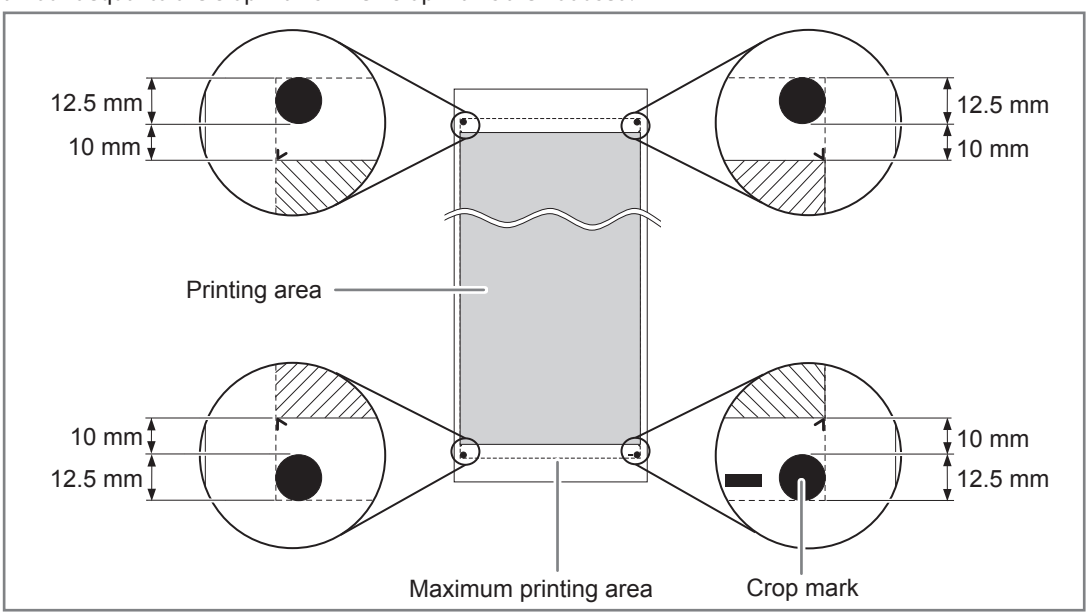
- When media has been loaded without installing the media clamps
- When the [SHEET TYPE] menu item is set to [CLEAR] (regardless of whether the media clamps are present)

*2 The amount of margin can be changed by making the setting of base point (print-start position).

☞ P. 39, "Setting the Print-Start Location"

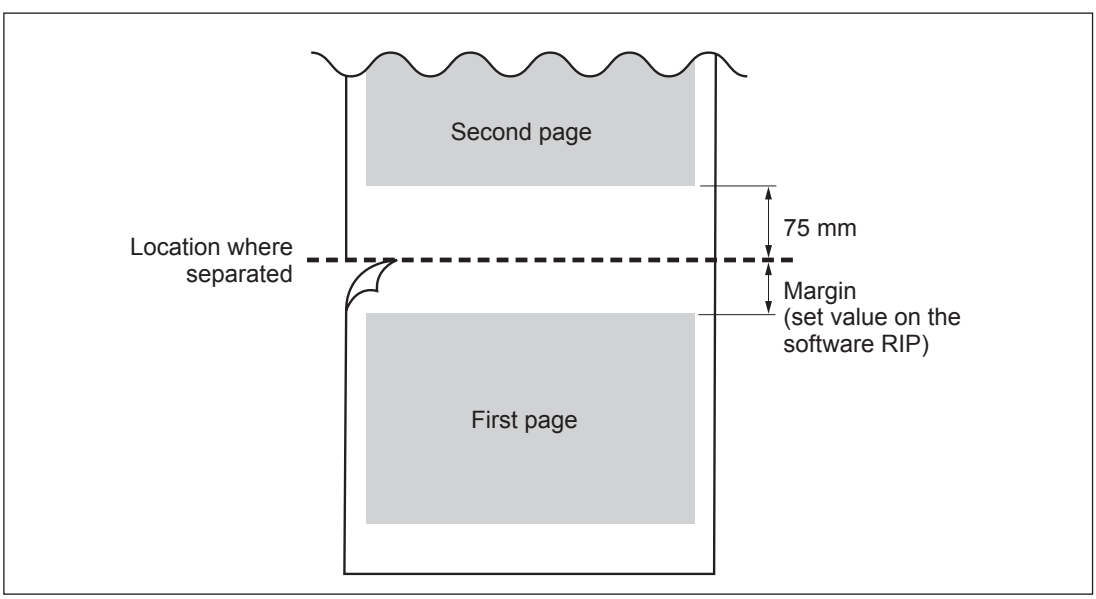
Maximum Printing Area When Using Crop Marks

The maximum printing area when crop marks are used is reduced from the maximum printing area by an amount equal to the crop marks when crop marks are not used.

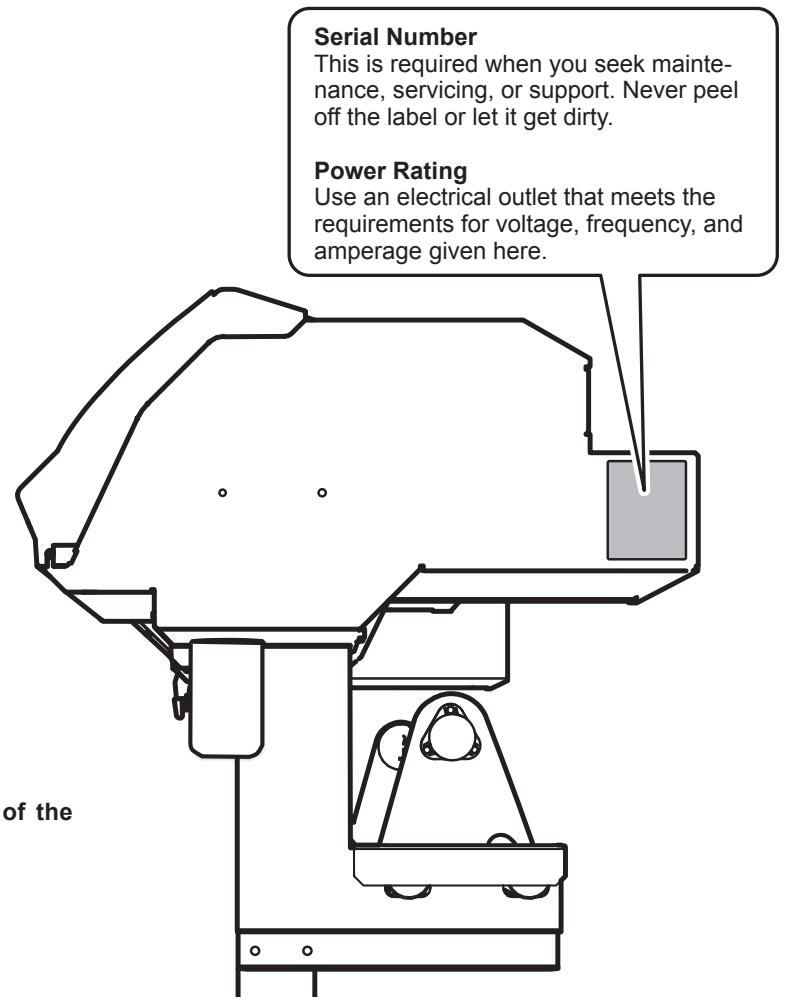


The Media-Cutoff Location During Continuous Printing

When a media-cutoff command is sent from the computer, the cutoff location on the media is as shown in the figure below.



Locations of the Power Rating and Serial Number Labels



Side view of the machine

Specifications

			RF-640/RF-640A
Printing technology			Piezoelectric inkjet
Media	Width		259 to 1,625 mm (10.2 to 64 in.)
	Thickness		Maximum 1.0 mm (39 mil) with liner
	Roll outer diameter		Maximum 210 mm (8.3 in.)
	Roll weight		Max. 40 kg (88 lbs.)
	Core diameter(*1)		76.2 mm (3 in.) or 50.8 mm (2 in.)
Printing width(*2)			Max. 1,615 mm (63.6 in.)
Ink cartridges	Types	RF-640	ECO-SOL MAX2 440-cc cartridge
		RF-640A	220-cc cartridge / 440-cc cartridge
	Colors		Four colors (cyan, magenta, yellow, and black)
Printing resolution (dots per inch)			Maximum 1,440 dpi
Distance accuracy (*3)			Error of less than ±0.3% of distance traveled, or ±0.3 mm, whichever is greater
Media heating system (*4)			Print heater, setting range for the preset temperature: 30 to 45°C (86 to 112°F) Dryer, setting range for the preset temperature: 30 to 50°C (86 to 122°F)
Connectivity			Ethernet (10BASE-T/100BASE-TX, automatic switching)
Power-saving function			Automatic sleep feature
Power requirements			AC 100 to 120 V ±10%, 8.1A, 50/60 Hz or AC 220 to 240 V ±10%, 4.1 A, 50/60 Hz
Power	During operation		Approx. 1,070 W
	Sleep mode		Approx. 14.5 W
Acoustic noise level	During operation		62 dB (A) or less
	During standby		49 dB (A) or less
Dimensions (with stand)			2,575 mm (W) x 795 mm (D) x 1,270 mm (H) (101.4 (W) x 31.1 (D) x 50 (H) in.)
Weight (with stand)			140 kg (309 lbs)
Environmental	Power on (*5)		Temperature: 15 to 32°C (59 to 90°F) (20°C [68°F] or more recommended), humidity: 35 to 80%RH (non-condensing)
	Power off		Temperature: 5 to 40°C (41 to 104°F), humidity: 20 to 80%RH (non-condensing)
Accessories			Exclusive stands, power cord, media clamps, media holder, replacement blades for separating knife, User's Manual, etc.

*1
The media holder of this machine is exclusive use for the media of paper tube (core) inner diameter 3 inches. To use 2 inches media, the optional media flanges are required.

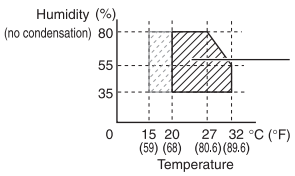
*2
The length of printing is subject to the limitations of the program.

*3
- Media type: Media specified by Roland DG Corp.
- Temperature: 25°C (77°F), humidity: 50%
- Roll media must be loaded correctly.
- Excluding expansion/contraction of the media
- Not assured when the print heater or dryer is used.
- All corrections or adjustment function of this machine have been made properly.
- Print travel: 1 m

*4
- Warm-up is required after power up. This may require 5 to 20 minutes, depending on the operating environment.
- Depending on the ambient temperature and media width, the preset temperature may fail to be reached.

*5

➢ Operating environment



Use in an operating environment with this range.

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